## DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT

LION COPOLYMER GEISMAR-LLC FORMER WASTE LAGOON SYSTEM- CELL A LAD008194060-PC-RN-1 AI#1433/PER20000002

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BOBBY JINDAL GOVERNOR



HAROLD LEGGETT, PH.D. SECRETARY

## State of Louisiana

## DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

### **CERTIFIED MAIL 70032260000593243419**

Mr. Keith Gordon Lion Copolymer Geismar LLC P.O. Box 397 Geismar, LA 70734

RE:

Lion Copolymer Geismar LLC

LAD 008 194 060

AI #1433 / PER20000002

Draft Hazardous Waste Post-Closure Permit for the Former Waste Lagoon System Cell A

Dear Mr. Gordon:

Attached, is your copy of the Lion Copolymer Geismar, Draft Hazardous Waste Post-Closure Permit, LAD 008194060-PC-RN-1, which incorporates language pertaining to the Post-Closure management of the Former Waste Lagoon System Cell A, at Lion Copolymer Geismar.

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft renewal hazardous waste operating permit. By requests and if the Department finds a significant degree of public interest, a public hearing will also be scheduled at least forty-five (45) days after the date on which the public notice is given. The date, time and location of the public hearing, if requested, and specific dates for the beginning and ending of the comment period are contained in the attached public notice.

Prior to taking a final action on the final renewal permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permit decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number 1433, EPA ID Number LAD 008 194 060 and Permit Activity Number PER20000002 on all future correspondence pertaining to this issue. If you have any questions concerning this matter, please contact Ms. Amy Exnicios of the Waste Permits Division at (225) 219-0029.

Sincerely,

Bijan Sharafkhani, P.E.

Administrator

Waste Permits Division

ale

Attachment

## PUBLIC NOTICE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ) LION COPOLYMER GEISMAR, LLC, GEISMAR FACILITY FORMER WASTE LAGOON SYSTEM CELL A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT

The LDEQ, Office of Environmental Services, is accepting written comments on a Hazardous Waste Post-Closure Permit for Lion Copolymer Geismar, LLC, P.O. Box 397 Geismar, LA 70734 for the Geismar Facility, Former Waste Lagoon System Cell A. The facility is located at 36191 Hwy 30, Geismar, Ascension Parish.

Lion Copolmer Geismar, LLC requests a hazardous waste permit governing the post closure care of the Former Waste Lagoon System-Cell B at the Geismar Facility. The Former Waste Lagoon System is made up of Cell A and Cell B. All wastes addressed in the draft permit were generated on site. The Former Waste Lagoon System ceased operation in 1988 and was certified closed in 1990. During operation the Former Waste Lagoon System received storm water from on site. During closure of the Former Waste Lagoon System, the waste was divided into two (2) sections, Cell A and Cell B; the waste in Cell B was placed in Cell A and capped. The original post closure permit (LAD 008194060-PC-1) for the Former Waste Lagoon System contained both Cell A and Cell B. On September 19, 2007, LDEQ approved Lion Copolymer's request to be released from post-closure care and maintenance requirements after completion of sixteen (16) of the thirty (30) years of post-closure care and maintenance for the Former Waste Lagoon System-Cell B.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. Written comments and/or written requests must be received by 12:30 p.m., Wednesday, August 6, 2008. Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazarodus waste post-closure permit and permit application are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5<sup>th</sup> Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

Additional copies may be reviewed at the Ascension Parish Library, Gonzales Branch, 708 South Irma Blvd, Gonzales, LA 70737 and the Iberville Parish Library, East Iberville Branch, 5715 Monticello Street, St. Gabriel, LA 70776.

Inquiries or requests for additional information regarding this permit action should be directed to Amy Exnicios, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-0029.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at <a href="mailto:deqmaillistrequest@la.gov">deqmaillistrequest@la.gov</a> or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft permit and associated information can be viewed on the LDEQ permits public webpage at <a href="www.deq.louisiana.gov/apps/pubNotice/default.asp">www.deq.louisiana.gov/apps/pubNotice/default.asp</a> and general information related to the public participation in permitting activities can be viewed at <a href="www.deq.louisiana.gov/portal/tabid/2198/Default.aspx">www.deq.louisiana.gov/portal/tabid/2198/Default.aspx</a>.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq pn listserv.htm

All correspondence should specify AI Number 1433, Permit Number LAD008194060-PC-RN-1, and Activity Number PER20000002.

Scheduled Publication Date: June 20, 2008

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## FACT SHEET

## **FACT SHEET**

## DRAFT HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT PREPARED FOR

Lion Copolymer Geismar LLC Former Waste Lagoon System-Cell A

> EPA ID# LAD008194060 Agency Interest #1433 PER20000002

> > Geismar, Louisiana Ascension Parish

Permit Number LAD008194060-PC-RN-1

### I. INTRODUCTION

This fact sheet has been developed in accordance with the Louisiana Administrative Code (LAC) 33:V.703.D and briefly sets forth principal and significant facts, legal, methodological and policy requirements of the proposed draft hazardous waste post-closure permit for Lion Copolymer Geismar, EPA ID Number LAD008194060, Agency Interest Number 1433, for the Former Waste Lagoon System-Cell A located in Geismar, Ascension Parish, Louisiana.

The Louisiana Department of Environmental Quality (LDEQ) has prepared this proposed draft hazardous waste permit for post-closure which addresses the requirements of LAC Title 33, Part V, Subpart 1 and the Federal Resource Conservation and Recovery Act (RCRA) as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA).

Lion Copolymer Geismar is seeking to renew a hazardous waste permit governing the post-closure care requirements for the Former Waste Lagoon System-Cell A.

## II. THE PERMITTING PROCESS

The purpose of this fact sheet is to initiate the permitting decision process. The LDEQ's Waste Permits Division is required to prepare this draft hazardous waste permit. The draft hazardous waste permit sets forth all the applicable conditions, which the permittee is required to comply with during the life of the permit. Lion Copolymer Geismar submitted its RCRA Post-Closure Permit Renewal Application, dated July 26, 2000.

The permitting process will afford the LDEQ, interested citizens, and other agencies the opportunity to evaluate the ability of the permittee to comply with the requirements of the

LAC 33:V, Subpart 1 and the Hazardous and Solid Waste Amendments (HSWA) portion.

The public is given a minimum of forty-five (45) days to review and comment on the draft post-closure permit. The Administrative Authority, prior to making a decision or taking any final action on the draft permit, will consider all significant comments. The decision of the Administrative Authority shall be to issue, deny, modify, or revoke the draft post-closure permit in accordance with LAC 33:V.705.

## A. DRAFT HAZARDOUS WASTE PERMIT

The Waste Permits Division reviewed the permit application and other pertinent technical information, and prepared a draft permit that contains the language that pertains to the post-closure care of the listed facilities.

This draft hazardous waste permit is a tentative determination and is not the final decision of the Administrative Authority.

## B. PUBLIC COMMENT PERIOD

LAC 33:V.715 requires that the public be given at least forty-five (45) days to comment on a draft permit decision.

The specific dates for the opening and closing of the public comment period are contained in the public notice that was issued for this particular permitting action. Any person interested in commenting on the draft permit for the Lion Copolymer Geismar must do so within the allotted forty-five (45) day comment period.

Public notice of the proposed permitting action shall be published in specified newspapers, announced on the designated radio station, and mailed to those persons contained on the facility's mailing list.

A public hearing for the draft permit will be held only if requested in writing. The date, location and time would be provided in the public notice for the hearing. LDEQ will hold the hearing at least forty-five (45) days after the date on which the public notice is given.

## C. LOCATIONS OF AVAILABLE INFORMATION

The administrative record, including all supporting documents is on file at the LDEQ Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana. These documents may be inspected and copied (at \$0.25 per copy page) at any time between the hours of 8:00 to 4:30 p.m., Monday through Friday (except holidays).

In addition, a copy of the draft post-closure permit, fact sheet, and supporting documents are available for review at the Ascension Parish Library, Gonzales Branch, 708 South Irma Boulevard, Gonzales, LA 70737.

## D. WRITTEN COMMENT SUBMISSION

Interested persons may submit written comments on the draft post-closure permit to the Administrative Authority, at the address listed below, on or before the closing date of the comment period. All comments should include:

- (1) the name and address of the commenter,
- (2) a concise statement of the exact basis for any comment and supporting relevant facts, upon which the comment is based,
- (3) identification of the facility commented on (the EPA Identification Number and the AI number), and
- (4) supporting relevant facts upon which the comments are based.

All comments, further requests for information (including copies of this decision and fact sheet), requests for a public hearing, and any requests by public interest groups or individuals who would like to be included in the mailing list, should be made in writing to

Ms. Soumaya Ghosn
Louisiana Department of Environmental Quality
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
(225) 219-3276 or fax (225) 219-3309

Any technical questions regarding this draft permit should be addressed to:

Ms. Amy Exnicios
Louisiana Department of Environmental Quality
Office of Environmental Services
Waste Permits Division
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313
(225) 219-0029 or fax (225) 219-3158

## III. DESCRIPTION OF OVERALL SITE

Lion Copolymer is the owner and operator of the Geismar Facility. Lion Copolymer Geismar is in the business of rubber production. The facility is an integrated chemical production facility that produces Ethylene Propylene Diene Monomer (EPDM) synthetic rubber and chemicals used in the production of rubber products.

## IV. HAZARDOUS WASTE FACILITIES

Lion Copolymer Geismar has a surface impoundment that is currently closed: the Former Waste Lagoon System Cell A and Cell B. All wastes addressed in the draft permit were generated on site.

The Former Waste Lagoon System ceased operation in 1988 and was certified closed in 1990. During operation the Former Waste Lagoon System received storm water from on site.

During closure of the Former Waste Lagoon System, the waste was divided into two (2) sections, Cell A and Cell B; the waste in Cell B was placed in Cell A and capped. The original post closure permit (LAD 008194060-PC-1) for the Former Waste Lagoon System contained both Cell A and Cell B. On September 19, 2007, LDEQ approved Lion Copolymer's request to be released from post-closure care and maintenance requirements after completion of sixteen (16) of the thirty (30) years of post-closure care and maintenance for the Former Waste Lagoon System-Cell B.

## V. FINANCIAL AND LIABILITY REQUIREMENTS

Lion Copolymer Geismar has submitted documentation to satisfy the financial assurance and liability requirements of LAC 33:V. Chapter 37.

## VI. SUMMARY OF ENVIRONMENTAL FACTORS CONSIDERED

In accordance with the requirements set forth by the Louisiana Supreme Court in <u>Save Ourselves v. Louisiana Environmental Control Commission</u> 1152 (la. 1983), the LDEQ has considered the following factors in is draft decision on this renewal post-closure permit. This is a preliminary based on information currently available to the LDEQ.

A. The potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible.

The unit addressed by this application is closed and is undergoing post-closure care. All aspects of the closure of the unit and the post-closure care are in compliance with State and Federal regulations. As detailed below, the design of the post-closure unit and the post-closure care requirements for the unit are adequate to avoid the potential and real adverse environmental impacts to the maximum extent possible.

One unit is addressed by this application. The unit is no longer operational; having been closed according to a closure plan approved by the Administrative Authority, and is undergoing post-closure care. There will be no further hazardous waste management activities associated with the unit. There is, however, wastes closed in place in the unit.

During the closure of the surface impoundment, the wastes were stabilized using EPA approved methods. The unit is covered by an engineered cap and a vegetative cover that is regularly inspected and maintained. These controls minimize the possibility of release into the air or surface and subsurface waters.

To address the possibility of release, a groundwater monitoring program for the unit is a part of the post-closure care requirements. All of the hazardous constituents listed in the permit are tested through the post-closure monitoring program. If a release is detected and corroborated, then a corrective action program will be implemented to treat or to remove the contaminants. This program will be in place for thirty years from the date of the closure of the unit with provisions that allow the Administrative Authority to lengthen or shorten the post-closure care period should conditions warrant such an action.

B. A cost benefit analysis of the environmental impact balanced against the social and economic benefits of the project demonstrates that the social and economic benefits outweigh environmental impacts.

There is no immediate environmental impact cost associated with the post-closure unit addressed in this permit. The post-closure care program would mitigate any potential environmental impact. Because this permit addresses an existing closed

unit there will be neither positive nor negative economic effects associated with this application. Since there is no environmental impact costs associated with this application, there is no need to offset such costs.

C. There are no <u>alternative projects</u> or <u>alternative sites</u> or <u>mitigating measures</u> which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable.

## ALTERNATIVE PROJECTS

This draft permit is for the post-closure of a hazardous waste surface impoundment. Any potential alternatives would involve the removal of the waste and eventual land disposal at some other site. There appears to be no known alternative projects that would offer more protection to the environment than issuing a post-closure permit for the closed unit without unduly curtailing non-environmental benefits.

## 2. ALTERNATIVE SITE

This draft permit renewal is for an existing facility. The hazardous waste unit to be permitted is a post-closure unit with wastes closed in place. The locations of the post-closure unit was determined by the previous location of the operational unit that was closed.

## 3. MITIGATING MEASURES

Lion Copolymer Geismar has instituted post-closure care requirements for the closed unit that are protective of human health and the environment. No mitigating measures would offer more protection to the environment than permitting the existing unit without unduly curtailing nonenvironmental benefits.

## SIGNATURE PAGE

## DRAFT PERMIT

## LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

## HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT

**PERMITTEE:** 

Lion Copolymer Geismar, LLC

PERMIT NUMBER:

LAD 008194060-PC-RN-1

Former Waste Lagoon System- Cell A

Agency Interest # 1433/Activity # PER20000002

**FACILITY LOCATION:** 

36191 Louisiana Highway 30, Ascension Parish

Geismar, Louisiana 70734

This permit is issued by the Louisiana Department of Environmental Quality (LDEQ) under the authority of the Louisiana Hazardous Waste Control Law R.S. 30:2171 et seq., and the regulations adopted thereunder and under the authority of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) to Lion Copolymer Geismar, (hereafter called the Permittee), for the Geismar Facility located in Geismar, Louisiana, at latitude 30° 12' 060" and longitude 091° 00' 018."

For the purposes of this permit, the "Administrative Authority" shall be the Secretary of the Louisiana Department of Environmental Quality, or his/her designee.

The permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein and the applicable regulations contained in the Louisiana Administrative Code, Title 33, Part V, Subpart 1, (LAC 33:V.Subpart 1). Applicable regulations are those that are in effect on the effective date of issuance of this permit.

This permit is based on the assumption that the information provided to LDEQ by the Permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of the HSWA of 1984, which modify Section 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit.

Section 212 provides authority to review and modify the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modification, revocation, and reissuance of this permit (see LAC 33:V.323) and potential enforcement action. The Permittee must

inform the LDEQ of any deviation from or changes in the information in the application that would affect the Permittee's ability to comply with the applicable regulations or permit conditions.
This permit shall be effective as of, and shall remain in effect until, unless revoked, reissued, modified or terminated in accordance with LAC 33:V.323 and 705 of the Louisiana Hazardous Waste Regulations. The Administrative Authority may issue any permit for a duration that is less than the maximum term of ten (10) years and the term shall not be extended beyond the maximum duration by modification in accordance with LAC 33:V.315.
Post-closure requirements of LAC 33:V. Subchapter B must continue for at least thirty (30) years after the date of closure for those units listed in Section II.O.1 of this permit. Expiration of this permit does not relieve the permittee of the responsibility to reapply for a permit for the remainder of the thirty (30) year post-closure care period.
Provisions of this permit may be appealed in writing pursuant to LA. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the Secretary elects to suspend other provisions as well. A request for hearing must be sent to the following:
Louisiana Department of Environmental Quality Office of the Secretary Attention: Hearings Clerk, Legal Services Division Post Office Box 4302 Baton Rouge, Louisiana 70821-4302
Draft
Cheryl Sonnier Nolan, Assistant Secretary  Louisiana Department of Environmental Quality  Date

## PUBLIC PARTICIPATION

### PUBLIC NOTICE

## LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ) LION COPOLYMER GEISMAR, LLC, GEISMAR FACILITY FORMER WASTE LAGOON SYSTEM CELL A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT

The LDEQ, Office of Environmental Services, is accepting written comments on a Hazardous Waste Post-Closure Permit for Lion Copolymer Geismar, LLC, P.O. Box 397 Geismar, LA 70734 for the Geismar Facility, Former Waste Lagoon System Cell A. The facility is located at 36191 Hwy 30, Geismar, Ascension Parish.

Lion Copolmer Geismar, LLC requests a hazardous waste permit governing the post closure care of the Former Waste Lagoon System- Cell B at the Geismar Facility. The Former Waste Lagoon System is made up of Cell A and Cell B. All wastes addressed in the draft permit were generated on site. The Former Waste Lagoon System ceased operation in 1988 and was certified closed in 1990. During operation the Former Waste Lagoon System received storm water from on site. During closure of the Former Waste Lagoon System, the waste was divided into two (2) sections, Cell A and Cell B; the waste in Cell B was placed in Cell A and capped. The original post closure permit (LAD 008194060-PC-1) for the Former Waste Lagoon System contained both Cell A and Cell B. On September 19, 2007, LDEQ approved Lion Copolymer's request to be released from post-closure care and maintenance requirements after completion of sixteen (16) of the thirty (30) years of post-closure care and maintenance for the Former Waste Lagoon System-Cell B.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. Written comments and/or written requests must be received by 12:30 p.m., Wednesday, August 6, 2008. Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazarodus waste post-closure permit and permit application are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5<sup>th</sup> Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

Additional copies may be reviewed at the Ascension Parish Library, Gonzales Branch, 708 South Irma Blvd, Gonzales, LA 70737 and the Iberville Parish Library, East Iberville Branch, 5715 Monticello Street, St. Gabriel, LA 70776.

Inquiries or requests for additional information regarding this permit action should be directed to Amy Exnicios, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-0029.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at <a href="mailto:deqmaillistrequest@la.gov">deqmaillistrequest@la.gov</a> or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft permit and associated information can be viewed on the LDEQ permits public webpage at <a href="https://www.deq.louisiana.gov/apps/pubNotice/default.asp">www.deq.louisiana.gov/apps/pubNotice/default.asp</a> and general information related to the public participation in permitting activities can be viewed at <a href="https://www.deq.louisiana.gov/portal/tabid/2198/Default.aspx">www.deq.louisiana.gov/portal/tabid/2198/Default.aspx</a>.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at <a href="https://www.doa.louisiana.gov/oes/listservpage/ldeq">www.doa.louisiana.gov/oes/listservpage/ldeq</a> pn\_listserv.htm

All correspondence should specify AI Number 1433, Permit Number LAD008194060-PC-RN-1, and Activity Number PER20000002.

Scheduled Publication Date: June 20, 2008

## LDEQ RADIO ANNOUNCEMENT

## DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT

The Louisiana Department of Environmental Quality is accepting written comments on a draft hazardous waste post closure permit for the former Waste Lagoon System Cell "A" for Lion Copolymer Geismar, LLC, Geismar Facility, located at 36191 Highway 30, Geismar, Ascension Parish.

The public comment period will end on Wednesday, August 6, 2008 at 12:30 p.m.

A copy of the draft hazardous waste post closure permit and related documents are available for review at the Ascension Parish Library – Gonzales Branch, 708 South Irma Boulevard, Gonzales, LA, Iberville Parish Library-East Iberville Branch, 5715 Monticello Street, Saint Gabriel, LA and the Louisiana Department of Environmental Quality Public Records Center in Baton Rouge, LA.

The detailed public notice is scheduled for publication in the <u>Gonzales Weekly</u> <u>Citizen</u> and <u>The Advocate</u> on June 20, 2008.

For any inquiries contact LDEQ Customer Service Center at (225) 219-LDEQ, that is (225) 219-5337.

## PART A APPLICATION

OMB#: 2050-0034 Expires 11/30/2005

				<del>, , , , , , , , , , , , , , , , , , , </del>								
SEND COMPLETED	United States Environmental	l Protectio	n Agency									
The Appropriate State or EPA Regional Office.	RCRA SUBTITLE C SITE IDEN	ITIFICA <sup>-</sup>	TION FORM									
1. Reason for	Reason for Submittal:											
Submittal (See instructions on page 14.)	☐ To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities)											
MARK ALL BOY/ES)	☐ To provide Subsequent Notification of Regulated Waste Activity (to update site identification information)											
MARK ALL BOX(ES) THAT APPLY	☐ As a component of a First RCRA Hazardous W	/aste Part A I	Permit Application									
	🛮 As a component of a Revised RCRA Hazardou	s Waste Par	A Permit Application (Am	endment #)								
	☐ As a component of the Hazardous Waste Repo	ort										
2. Site EPA ID Number (page 15)												
3. Site Name (page 15)	Name: Lion Copolymer Geismar, LLC											
4. Site Location	n Street Address: 36191 Louisiana Highway 30											
Information (page 15)	City Town or Village: Geignar   State: LA											
	County Name: Ascension											
5. Site Land Type (page 15)	Site Land Type: ☑ Private ☐ County ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other											
6. North American Industry Classification	A.   3   2   5   1   9   9	B. I_	3 2 5 2 1	2								
System (NAICS) Code(s) for the Site (page 15)	C.   3   2   5   3   2   0	D. I_		l								
7. Site Mailing	Street or P. O. Box: Post Office Box 397											
Address (page 16)	City, Town, or Village: Geismar											
	State: LA											
	Country: Ascension		Zip Code: 70734									
8. Site Contact Person	First Name: Keith	MI:	Last Name: Gordon									
(page 16)	Phone Number: (225) 673-0783 Extensio	n:		th.gordon@ oncopolymer.com								
9. Operator and Legal Owner	A. Name of Site's Operator: Lion Copolymer Geismar, L	iLC	Date Became Operator 06/29/									
of the Site (pages 16 and 17)	Operator Type: ☑ Private ☑ County ☐ District	☐ Federal	☐ Indian ☐ Municipal	☐ State ☐ Other								
	B. Name of Site's Legal Owner: Lion Copolymer Geismar, LLC	nm/dd/yyyy):										
	Owner Type:   Private  County  District	:	☐ Indian ☐ Municipal	☐ State ☐ Other								

9. Legal Owner	Street or P. O. Box:								
(Continued)	City, Town, or Village:								
Address	State: LA								
	Country: Ascension	<del></del>	<del>.</del>	ı	Zip Code: 70734				
	Country. Ascension		<del></del>		Zip 00dc. 70731				
10. Type of Regulated Mark "Yes" or "No	-	ete any a	additional boxes	as instructe	d. (See instructions on pages 18 to 21.)				
A. Hazardous Was Complete all pa	te Activities rts for 1 through 6.								
Y⊠N□ 1. Generator	of Hazardous Waste			YON⊠	2. Transporter of Hazardous Waste				
If "Yes", ch	noose only one of the fol	lowing -	a, b, or c.	V0.V6					
M v 100°	Greater than 1,000 kg/ma	5 (2 200 l	he /mo )	Y LI N 🔯	3. Treater, Storer, or Disposer of				
₩ a. LQG.	of non-acute hazardous				Hazardous Waste (at your site) Note:  A hazardous waste permit is required for				
					this activity.				
☐ b. SQG:	100 to 1,000 kg/mo (220				·				
	of non-acute hazardous	waste; or	••	YONZ	4. Recycler of Hazardous Waste (at you				
🗅 c. CESO	G: Less than 100 kg/mo	(220 lbs./	mo.)		site)				
	of non-acute hazardor	ıs waste		YONE	5. Exempt Boiler and/or Industrial				
In addition, it	ndicate other generator a	ctivities			Furnace				
iii addition, ii	indicate office generator a		•		If "Yes", mark each that applies.				
Y 🖸 N 🚨 d. Unite	d States Importer of Hazai	dous Wa	ste		<ul> <li>a. Small Quantity On-site Burner</li> <li>Exemption</li> </ul>				
Y ロ N Ø3 e. Mixed	d Waste (hazardous and ra	idioactive	e) Generator		□ b. Smelting, Melting, and Refining Furnace Exemption				
				YONO	6. Underground injection Control				
B. Universal Waste	Activities			c. u	sed Oil Activities				
				M	lark all boxes that apply.				
	itity Handler of Universal more) [refer to your Sta			V D N M	I. Used Oil Transporter				
•	what is regulated]. Indica	-			If "Yes", mark each that applies.				
	rated and/or accumulate				<ul><li>a. Transporter</li></ul>				
mark all bo	xes that apply:				□ b. Transfer Facility				
	<u>Ge</u>	nerate	<u>Accumulate</u>	YDNEAZ	2. Used Oil Processor and/or Re-refiner				
a. Batteries			0		If "Yes", mark each that applies.				
b. Pesticides	·		. 👝		a. Processor				
c. Thermosta	ts ·	<b>D</b>			☐ b. Re-refiner				
d. Lamps		0	0	YONEDS	3. Off-Specification Used Oil Burner				
e. Other (spe	cify)	0	0	YONE	I. Used Oil Fuel Marketer				
f. Other (spe	cify)	0	0		If "Yes", mark each that applies.  ☐ a. Marketer Who Directs Shipment of				
g. Other (spe	cify)	0	٥		Off-Specification Used Oil to Off-Specification Used Oil Burner				
Y □ N 欧 2 - Dectination	Facility for Universal Wa	ste			<ul> <li>b. Marketer Who First Claims the</li> <li>Used Oil Meets the Specifications</li> </ul>				
	dous waste permit may be		for this activity		OCC On Meets the Openications				

## EPA ID NO: | L | A | D | | 0 | 0 | 8 | | 1 | 9 | 4 | | 0 | 6 | 0 | OMB#: 2050-0034 Expires 11/30/2005 11. Description of Hazardous Wastes (See instructions on page 22.) A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed. D002 D003 D005 D006 D007 D008 D001 D011 D018 D019 D021 D022 D024 D009 D025 D026 D028 D029 D033 D035 D039 B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes. 12. Comments (See instructions on page 22.) This Part A Hazardous Waste Permit Application is included with the submittal of a RCRA Post-Closure Permit Renewal Application for Cell A of the Former Waste Lagoon System at the Lion Copolymer Geismar, LLC Geismar Facility. Cell A is an engineered, closed, hazardous waste landfill. Cell A does not generate or receive any wastes. The waste and process codes included in Part A Application represent the wastes that were formerly disposed in Cell A and/or wastes generated at the Lion LLC Facility as a whole and do not indicate any current operations within the ormer Waste Lagoon System. Cell B was formerly included in the post-closure permit but has since received a No Further Action-At This Time assessment from the LDEQ. Continued from Section 11.A: D040, D043, F001, F002, F003, F004, F005, P012, P020, P022, P068, P076, <u> 2078, 2098, 2105, 2205, 2002, 2003, 2008, 2012, 2019, 2021, 2031, 2037, 2052, 2057, 2063, 2070, 2077</u> U108, U112, U117, U122, U123, U133, U135, U138, U144, U147, U148, U188, U190, U196, U201, U211, U213, U218, U220, U239, U244, U328, U080, U098, U108, U151, U154, U159, U161, U170, U404 13. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all operator(s) and owner(s) must sign (see 40 CFR 270.10 (b) and 270.11). (See instructions on page 22.)

Signature of operator, owner, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
Philip F. Spillone	Philip Spillane, Plant Manager	03/17/2008

EPA ID NO: | L | A | D | | 0 | 8 | | 1 | 9 | 4 | | 0 | 6 | 0 | OMB #: 2050-0034 Expires 11/30/2005

## United States Environmental Protection Agency

## HAZARDOUS WASTE PERMIT INFORMATION FORM

First Name: Keith MI: Last Name: Gord													Last Name: Gordon			
Ph	Phone Number: {225} 673-0783  Phone Number Extension:  Street or P.O. Box:													Phone Number Extension:		
Str	P.O. Box 397															
Cit	Geismar															
Sta	ite:	LA														
Со	USA 70734														Zip Code: 70734	
Str	P.O. Box 397															
Cit	Geismar															
Sta	tate: LA															
Co	USA /0/34 (225) 6/3-0/83															
Str	treet or P.O. Box: P.O. Box 397															
City	y, To	own,	or\	/illa	ge:	Ge	isma	ar								
Sta	te:	LA														
Col	untr	y:	US	A						z	ip Co	de	:	70734		Phone Number (225) 673-0783
Fac	ility	Exis	sten	ce [	)ate	(mn	n/dd	/ууу	y):		02/	01	/1	.962		
ermi	its (	See i	insti	ructi	ons	oл	page	24)	(S	ee	e at	ta	ch	ed list	on Ta	ble 1)
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bive	e a l	brief	des	crip	tion	; se	e ins	struc	tior	18	on pa	ge	24	l)		
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Box: City, Town, or Villa State: LA Country: USA Facility Existence E  ermits (See instruction B.  ovide a brief descrip Geismar, LLC-	Phone Number: (225  Street or P.O. Box:  City, Town, or Village:  State: LA  Country: USA  Street or P.O. Box:  City, Town, or Village:  State: LA  Country: USA  Street or P.O. Box:  City, Town, or Village:  State: LA  Country: USA  Street or P.O. Box:  City, Town, or Village:  State: LA  Country: USA  Facility Existence Date  ermits (See instructions  B. Period Country: USA  country: USA  Facility Existence Date  ermits (See instructions  B. Period Country: USA  Country: USA  Country: USA  Country: USA  Facility Existence Date  ermits (See instructions  B. Period Country: USA  Count	Phone Number: (225)  Street or P.O. Box:  City, Town, or Village:  Ge  State: LA  Country: USA  Street or P.O. Box: P.C.  City, Town, or Village: Ge:  State: LA  Country: USA  Street or P.O. Box: P.C.  City, Town, or Village: Ge:  State: LA  Country: USA  Street or P.O. Box: P.C.  City, Town, or Village: Ge:  State: LA  Country: USA  Facility Existence Date (minus)  B. Permit (minus)  B. Permit (minus)  B. Permit (minus)  Country: USA  Facility Existence Date (minus)  B. Permit (minus)  Country: USA  Country: USA  Facility Existence Date (minus)  Country: USA  Country: USA  Facility Existence Date (minus)  Country: USA  Facility Existence Date (minus)  Country: USA  Country: USA  Facility Existence Date (minus)  Country: USA  Facility Existence Date (minus)  Country: USA  Country: USA  Country: USA  Facility Existence Date (minus)  Country: USA  Country: USA  Facility Existence Date (minus)  Country: USA  Country: USA  Country: USA  Facility Existence Date (minus)  Country: USA  Country: USA  Country: USA  Facility Existence Date (minus)	Phone Number: (225) 673  Street or P.O. Box: P.O. 1  City, Town, or Village: Geism  State: LA  Country: USA  Street or P.O. Box: P.O. E  City, Town, or Village: Geism  State: LA  Country: USA  Street or P.O. Box: P.O. E  City, Town, or Village: Geism  State: LA  Country: USA  Facility Existence Date (mm/dd  ermits (See instructions on page  B. Permit Num  B. Permit Num  B. Permit Num  Country: USA  Geismar, LLC-Geismar	Phone Number: (225) 673-07  Street or P.O. Box: P.O. Box City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box City, Town, or Village: Geismar  State: LA  Country: USA  Facility Existence Date (mm/dd/yyy)  ermits (See instructions on page 24)  B. Permit Number  Devide a brief description; see instructions on page 24  Geismar, LLC-Geismar Fac	Phone Number: (225) 673-0783  Street or P.O. Box: P.O. Box 39  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 39  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 39  City, Town, or Village: Geismax  State: LA  Country: USA  Facility Existence Date (mm/dd/yyyy):  ermits (See instructions on page 24) (See instructions	Phone Number: (225) 673-0783  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Facility Existence Date (mm/dd/yyyy):  ermits (See instructions on page 24) (See  B. Permit Number  B. Permit Number  ovide a brief description; see instructions  Geismar, LLC-Geismar Facility	Phone Number: (225) 673-0783  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Facility Existence Date (mm/dd/yyyy): 02/  ermits (See instructions on page 24) (See at: B. Permit Number  B. Permit Number  ovide a brief description; see instructions on page 24)  Geismar, LLC-Geismar Facility is	Phone Number: (225) 673-0783  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Facility Existence Date (mm/dd/yyyy): 02/01  ermits (See instructions on page 24) (See atta  B. Permit Number  Devide a brief description; see instructions on page Geismar, LLC-Geismar Facility is a	Phone Number: (225) 673-0783  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Facility Existence Date (mm/dd/yyyy): 02/01/1  ermits (See instructions on page 24) (See attach  B. Permit Number  Devide a brief description; see instructions on page 24)  Geismar, LLC-Geismar Facility is an	Phone Number: (225) 673-0783  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Facility Existence Date (mm/dd/yyyy): 02/01/1962  ermits (See instructions on page 24) (See attached list  B. Permit Number  B. Permit Number  Ovide a brief description; see instructions on page 24)  Geismar, LLC-Geismar Facility is an integrate	Phone Number: (225) 673-0783  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Street or P.O. Box: P.O. Box 397  City, Town, or Village: Geismar  State: LA  Country: USA  Zip Code: 70734  Facility Existence Date (mm/dd/yyyy): 02/01/1962  ermits (See instructions on page 24) (See attached list on Ta  B. Permit Number

TABLE 1
LIST OF ENVIRONMENTAL PERMITS
LION COPOLYMER GEISMAR, LLC

Л. Permit Type (Enter Code)	B. Permit Number	C. Description					
Е	2572-V4	Air Permit					
E	514C-V2	Air Permit					
E	2242-V1	Air Permit					
E	2292-V1	Air Permit					
E	2333-V1	Air Permit					
E	2327-V2	Air Permit					
Е	2531-V1	Air Permit					
E	2041-V0	Air Permit					
E	2551-V1	Air Permit					
E	2305-V1	Air Permit					
E	2099-V2	Air Permit					
E	1186-V0	Air Permit					
E	3041-V0	Air Permit					
	7 1 0000	Louisiana Pollutant Discharge					
E	LA0000752	Elimination System Permit					
R	LAD008194060-PC-1	Hazardous Waste Permit					
R	G-005-2103	Solid Waste Generator Number					

## EPAID NO: | L | A | D | | 0 | 0 | 8 | 1 | 1 | 9 | 4 | 1 | 0 | 6 | 0 |

OMB #: 2050-0034 Expires 11/30/2005

ocess Codes and Design Capacities (See instructions on page 24) - Enter Information in the Sections on Form Page 3.

- A. PROCESS CODE Enter the code from the list of process codes in the table below that best describes each process to be used at the facility. Fifteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), enter the process information in Item 9 (including a description).
- B. PROCESS DESIGN CAPACITY- For each code entered in Section A, enter the capacity of the process.
  - AMOUNT Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
  - 2. UNIT OF MEASURE For each amount entered in Section B(1), enter the code in Section B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS	PROCESS	APPROPRIATE UNITS OF MEASURE	PROCESS	PROCESS	APPROPRIATE UNITS OF MEASURE
CODE		FOR PROCESS DESIGN CAPACITY	CODE		FOR PROCESS DESIGN CAPACITY
	Disposal:	******	-	Treatment (continued):	
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81 T82	Cement Kiln Lime Kiln	For T81-T93:
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T83 T84 T85	Aggregate Kiln Phosphate Kiln Coke Oven	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric
D81	Land Treatment	Acres or Hectares	T86	Blast Furnace	Tons Per Hour; Short Tons Per Day; Btu Per
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T87	Smelting, Melting, or Refining	Hour; Liters Per Hour; Kilograms Per
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Furnace Titanium Dioxide Chloride Oxidation Reactor	Hour; or Million Btu Per Hour
D99	Other Disposal	Any Unit of Measure in Code Table Below	T89	Methane Reforming Furnace Pulping Liquor Recovery	
S01	Storage: Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T90 T91	Furnace Combustion Device Used In	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	'''	The Recovery Of Sulfur Values From Spent Sulfuric Acid	
	Waste Pile	Cubic Yards or Cubic Meters	T92 T93	Halogen Acid Furnaces Other Industrial Furnaces	
1504	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards		Listed In 40 CFR \$260.10	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons
S06	Containment Building Storage	Cubic Yards or Cubic Meters			Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per
S99	Other Storage	Any Unit of Measure in Code Table Below		Marie alle and Cook and Viv	Hour
1	Treatment:		X01	Miscellaneous (Subpart X):  Open Burning/Open	Any Unit of Measure in Code Table Below
T01	Tank Treatment	Gallons Per Day: Liters Per Day	1	Detonation	ŕ
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour;			Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
		Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour;			Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
		Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF	UNIT OF	UNIT OF .	UNIT OF	UNIT OF	UNIT OF
MEASURE	MEASURE CODE	MEASURE	MEASURE CODE	MEASURE	MEASURE CODE
Gallons	E U L L	Short Tons Per Hour Metric Tons Per Hour Short Tons Per Day Metric Tons Per Day Pounds Per Hour Kilograms Per Hour Million Btu Per Hour	W N S J R	Cubic Yards Cubic Meters Acres Acres Hectares Hectare meter Btu Per Hour	C B A Q F

EPA ID NO: | L | A | D | | 0 | 8 | | 1 | 9 | 4 | | 0 | 6 | 0 | OMB #: 2050-0034 Expires 11/30/2005 ocess Codes and Design Capacities (Continued) EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons. B. PROCESS DESIGN CAPACITY C. Process Total (2) Unit of Number of Line Process Code Measure Units Number (From list above) (1) Amount (Specify) (Enter code) s . 7 8 8 G 0 1 0 001 D 8 Cell A of the Former Waste Lagoon System Y 1 encompasses approximately 2.5 acres. 2 Cell A is an engineered, CLOSED hazardous 3 4 waste landfill and does not currently generate or receive any wastes. 5 6 7 8 9 0 1 1 1 2 3 4 5 NOTE: If you need to list more than 15 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9. 9. Other Processes (See instructions on page 25 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes) Line B. PROCESS DESIGN CAPACITY Number Process Total (2) Unit of (Enter#s in Number of **Process Code** Measure sequence (1) Amount (Specify) Units D. Description of Process (From list above) (Enter code) 0 0 1 X 0 100.000 U In-situ Vitrification 2 4

EPA Form 8700-23 (Revised 3/2005)

## EPA ID NO: 1 L A D I O O B I 1 9 4 I 0 6 0

OMB #: 2050-0034 Expires 11/30/2005

Description of Hazardous Wastes (See instructions on page 25) - Enter information in the Sections on Form Page 5.

EPA HAZARDOUS WASTE NUMBER - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

- B. ESTIMATED ANNUAL QUANTITY For each listed waste entered in Section A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Section A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE For each quantity entered in Section B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	κ
TONS	Τ	METRIC TONS	м

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

### D. PROCESSES

### 1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the listed hazardous wastes.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES, IF MORE ARE NEEDED:

- 1. Enter the first two as described above.
- 2. Enter "000" in the extreme right box of Item 10.D(1).
- 3. Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.
- 2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- 1. Select one of the EPA Hazardous Waste Numbers and enter it in Section A. On the same line complete Sections B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- 2. In Section A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Section D(2) on that line enter "included with above" and make no other entries on that line.
- 3. Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 10 (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

				A. PA	_	B. Estimated Annual	C. Unit of		-				ı	D. PROCI	ESSES	
	ne nber		naza Wasi Enter	e No	<b>.</b>	Quantity of Waste	Measure (Enter code)			(1) PR	CESS	CODE	S (Ente	r code)		(2) PROCESS DESCRIPTION- (If a code is not entered in D(1))
Х	1	к	0	5	4	900	Р	T	0	3	D	8	0			
X	2	Ð	0	0	2	400	Р	T	0	3	D	8	0			
	3	ū	0	0	1	100	Р	T	0	3	D	8	0			,
Х	4	D	0	0	2											Included With Above

EPA ID NO: | L | A | D | | 0 | 0 | 8 | 1 | 9 | 4 | | 0 | 6 | 0 |

OMB #: 2050-0034 Expires 11/30/2005

	Descri	ption	of F	lazai	dous	s Wastes (Con	tinued. Use th	e Add	itional	Shoot(s	) as ne	cessa	y; nun	ber pa	ges as	5 a, etc	c.)
			E	1. PA		B. Estimated	c.							D. PR	OCESS	ES	
Li. Nun	ne nber	,	laza Wasi Inter	e No	<b>)</b> .	Annual Quantity of Waste	Unit of Measure (Enter code)	(1) PROCESS CODES (Enter code)								(2) PROCESS DESCRIPTION (If a code is not entered in D(1))	
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	2	D	0	0	2	0	Р	D	8	0							
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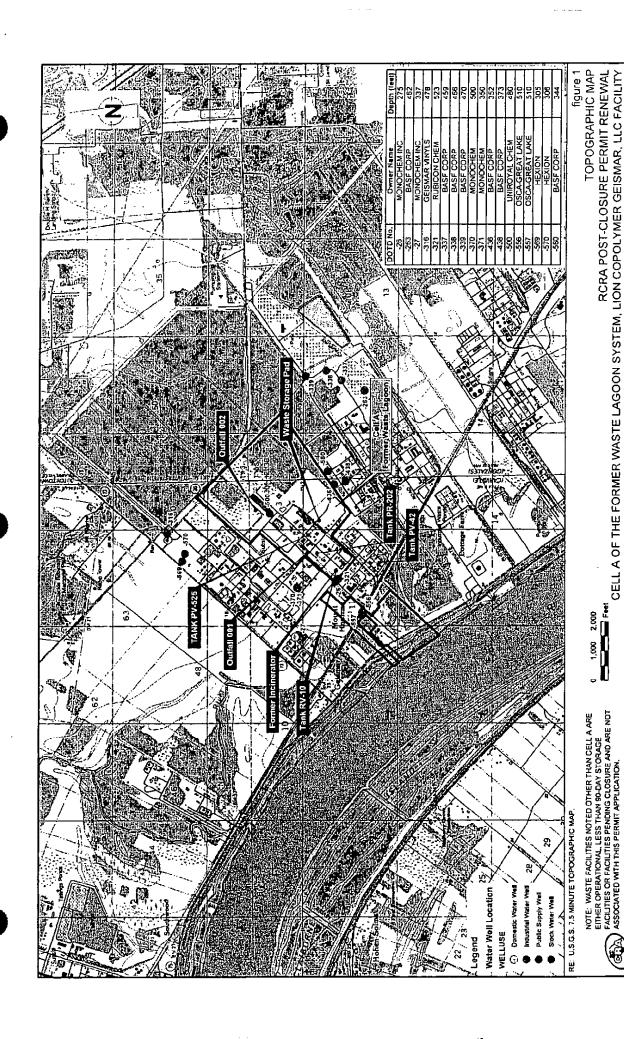
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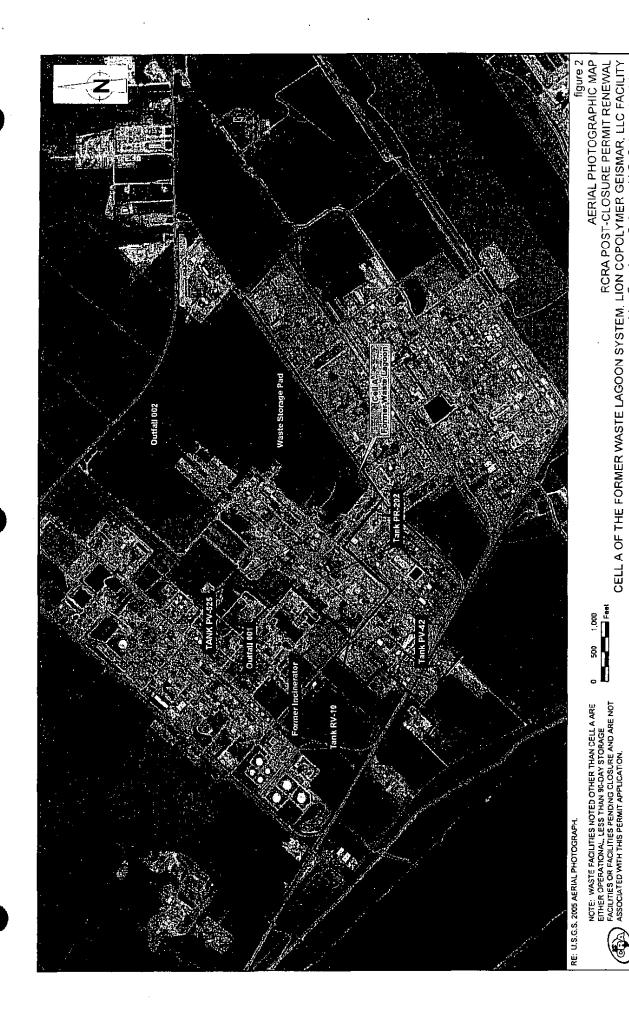
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Map (See instructions on pages 25 and 26) (See Figure 1)
Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.
12. Facility Drawing (See instructions on page 26) (See Figure 2)
All existing facilities must include a scale drawing of the facility (see instructions for more detail).
13. Photographs (See instructions on page 26) (See Figure 2)
All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).
14. Comments (See instructions on page 26)
This Part A Hazardous Waste Permit Application is included with the submittal of a RCRA Post-Closure
Permit Renewal Application for Cell A of the Former Waste Lagoon System at the Lion Copolymer
Geismar, LLC Geismar Facility. Cell A is an engineered, closed, hazardous waste landfill. Cell A
does not generate or receive any wastes. The waste and process codes included in Part A Application
represent the wastes that were formerly disposed in Cell A and/or wastes generated at the Lion
Copolymer Geismar, LLC Facility as a whole and do not indicate any current operations within the
Former Waste Lagoon System. Cell B was formerly included in the post-closure permit but has since
received a No Further Action-At This Time assessment from the LDEQ.

LDEQ-EDMS Document 37007677, Page 31 of 124

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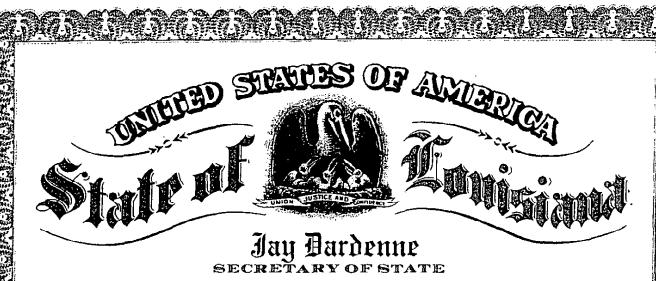


Lion Copolymer Geismar, LLC, Geismar, Louisiana



Lion Copolymer Geismar, LLC, Geismar, Louisiana

27316-09(013)PR-8R002



As Secretary of State, of the State of Louisiana, I do hereby Certify that LION COPOLYMER GEISMAR, LLC

A limited liability company domiciled in WILMINGTON, DELAWARE,

Filed charter and qualified to do business in this State on April 23, 2007,

I further certify that the records of this Office indicate the company has paid all fees due the Secretary of State, and so far as the Office of the Secretary of State is concerned, is in good standing and is authorized to do business in this State.

I further certify that this certificate is not intended to reflect the financial condition of this company since this information is not available from the records of this Office.

In lestimony whereof, I have hereunto set my hand and caused the Seat of my Office to be affixed at the City of Baton Rouge on,

VSC 36434078Q

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# TABLE OF CONTENTS

## TABLE OF CONTENTS

I.	PERMIT PREAMBLE							
II.	GENERAL PERMIT CONDITIONS	5						
	II.A. DURATION OF PERMIT	5						
	II.B. EFFECT OF PERMIT	5						
	II.C. PERMIT ACTIONS	5						
	II.D. SEVERABILITY	5						
	II.E. DUTIES AND REQUIREMENTS	6						
III.	GENERAL POST-CLOSURE CONDITIONS							
	III.A. DESIGN AND OPERATION OF ALL FACILITIES	16						
	III.B. REQUIRED NOTICE	16						
	III.C. GENERAL WASTE ANALYSIS	16						
	III.D. SECURITY	16						
	III.E. GENERAL INSPECTION REQUIREMENTS	16						
	III.F. PERSONNEL TRAINING							
	III.G. GENERAL REQUIREMENTS FOR IGNITABLE,							
	REACTIVE, OR INCOMPATIBLE WASTE	16						
	III.H. LOCATION STANDARDS	17						
	III.I. PRECIPITATION RUN-ON AND RUN-OFF	17						
	III.J. HURRICANE EVENTS	17						
	III.K PREPAREDNESS AND PREVENTION	17						
	III.L. CONTINGENCY PLAN	18						
	III.M. MANIFEST SYSTEM	18						
	III.N. RECORDKEEPING AND REPORTING	18						
	III.O. POST-CLOSURE							
	III.P. COST ESTIMATE FOR POST-CLOSURE							
	III.Q. FINANCIAL ASSURANCE FOR CLOSURE UNITS	21						
	III.R. LIABILITY REQUIREMENTS	21						
	III.S. INCAPACITY OF THE PERMITTEE	21						
	III.T. POST-CLOSURE NOTICES	21						
IV.	PERMITTED CLOSED UNITS	22						
V.	PERMIT CONDITIONS APPLICABLE TO PERMITTED FACILITIES							
	V.A. POST-CLOSURE CARE PERIOD							
• •	V.B. POST-CLOSURE MAINTENANCE	23						
	V.C. POST-CLOSURE RESTRICTIONS	24						
	V.D. POST-CLOSURE USE OF PROPERTY							
VI.	GROUND WATER PROTECTION							
	VI.A APPLICABILITY							
	VI.B. REQURIED PROGRAMS							
	VI.C. GROUNDWATER PROTECTION STANDARD	25						
	VI.D. HAZARD CONSITITUENTS, PARAMETERS, ANALYTICAL FREQUENCY,							
	AND CONCENTRATION LIMITS	$\dots 26$						
	VI.E. POINT OF COMPLIANCE							
	VI.F. COMPLIANCE PERIOD							
	VLG GENERAL REQUIREMENTS	3						

	VI.H.	DETECTION MONITORING PROGRAM	33
		COMPLIANCE MONITORING	
	VI.J.	CORRECTIVE ACTION PROGRAM	37
	VI.K.	CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS	
		AND GEOTECHNICAL BOREHOLES	39
	VI.L.	REPORTING AND NOTIFICATION REQUIRMENTS	40
VII.	1984 I	HAZARDOUS AND SOLID WASTE AMENDMENTS TO RCRA	43

# LIST OF ATTACHMENTS

ATTACHMENT 1

LIST OF FACILITY DOCUMENTS INCORPORATED IN THE PERMIT BY REFERENCE

# BODY OF PERMIT

# DRAFT HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT

LION COPOLYMER GEISMAR, LLC EPA ID# LAD 008194060 Agency Interest #1433

Ascension Parish
Geismar, Louisiana
PER20000002
Permit Number LAD 008194060-PC-RN-1

### I. PERMIT PREAMBLE

This permit is issued to Lion Copolymer Geismar, LLC, hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. seq., and the regulations adopted thereunder.

### **GLOSSARY OF TERMS**

For the purpose of this permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

- "Administrative Authority" means the Secretary of the Louisiana Department of Environmental Quality or his/her designee (including appropriate assistant secretary).
- "Application" refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a permit.
- "Area of Concern" (AOC) means any discernable unit or area which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly-identified SWMU.
- "Area of Investigation" (AOI) is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).
- "Beneficial Resource" describes natural resources that are useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific groundwater or surface water sources, as a "Special Beneficial Resource," or "Designated Beneficial Resource." The beneficial resources then may be entitled to greater protection from contamination.
- "Constituents of Concern" (COC) means the COPC's that pose a significant risk.
- "Constituents of Potential Concern" (COPC) means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPC's for each release site based on existing sampling data, waste analysis reports, etc.
- "Conceptual Site Model" (CSM) is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

- "CWA" means Clean Water Act.
- "Corrective Action" is an activity conducted to protect human health and the environment.
- "Dense Nonaqueous Phase Liquid (DNAPL)" a dense liquid not dissolved in water, commonly referred to as "free product."
- "Department" means the Louisiana Department of Environmental Quality (LDEQ).
- "EPA" means the United States Environmental Protection Agency.
- "Facility" means, for the purpose of conducting corrective action under LAC 33:V.3322, all the contiguous property under the control of the Permittee.
- "HSWA" means the 1984 Hazardous and Solid Waste Amendments to RCRA.
- "Hazardous Constituent" means any constituent identified in LAC 33:V.Chapter 31.Table 1, or any constituent identified in LAC 33:V.3325.Table 4.
- "LDEQ" means the Louisiana Department of Environmental Quality.
- "Light Nonaqueous Phase Liquid (LNAPL)" a light liquid not dissolved in water, commonly referred to as "free product."
- "Newly-discovered Release" any release(s) of hazardous waste, including hazardous constituents, in which there is a statistically significant in crease over the background data for the media of concern, during the course of groundwater monitoring, field investigation, environmental auditing, or by other means.
- "Operating Record" means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this permit, document noncompliance with this permit, or document actions taken to remedy noncompliance with this permit. A minimum list of documents that must be included in the operating record are identified at LAC 33:V.1529.B.
- "Permittee" means Lion Copolymer Geismar, LLC, 36191 Louisiana Highway 30, Geismar, Louisiana 70734.
- "RCRA Permit" means the full permit, with RCRA and HSWA portions.
- "RFA" means RCRA Facility Assessment.
- "RFI" means RCRA Facility Investigation.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

"SARA" means Superfund Amendments and Reauthorization Action of 1986.

"Solid Waste Management Unit" (SWMU) means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

"Stabilization" is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to this permit.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as permit requirements until permit modification procedures as specified in Condition II.C of the permit and LAC 33:V.321 are completed.

# II. GENERAL PERMIT CONDITIONS

#### II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

# II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to conduct post-closure care activities associated with the Former Waste Lagoon-Cell A in accordance with the conditions of this permit and LAC 33:V.2521.B. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, or under Section 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

# II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

#### II.D. SEVERABILITY

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

# II.E. DUTIES AND REQUIREMENTS

# II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit (LAC 33:V.701), constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

# II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

### II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

# II.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

# II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

# II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator

staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

# II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit and in accordance with LAC 33:V.309.H.

# II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- II.E.8.a. enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;
- II.E.8.b. have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;
- II.E.8.c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and
- **II.E.8.d.** sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

# II.E.9. Sample Monitoring and Records

- II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision, or an equivalent method.
- **II.E.9.b.** Records of monitoring information shall include:
  - II.E.9.b.(1) the date, exact place, and time of sampling or measurements;

**II.E.9.b.(2)** the name(s) and signature(s) of the individual(s) who performed the sampling or measurements;

**II.E.9.b.(3)** the date(s) analyses were performed;

II.E.9.b.(4) the name(s) and signature(s) of the individual(s) who performed the analyses;

II.E.9.b.(5) the analytical techniques or methods used;

II.E.9.b.(6) the results of such analyses; and

II.E.9.b.(7) associated quality assurance performance data.

# II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1) any commercial laboratory providing analytical results and test data to the LDEQ required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the LDEQ.

LAC 33:I. Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website: <a href="http://www.deq.louisiana.gov/portal/tabid/2412/Default.aspx">http://www.deq.louisiana.gov/portal/tabid/2412/Default.aspx</a>.

In accordance with LAC 33:I.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the LDEQ;
- required to be included in a monitoring report submitted to the LDEQ;
- required to be submitted by contract; or
- otherwise required by the LDEQ regulations.

This includes, but is not limited to data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

II.E.9.c.(2) If the Permittee decides to use their own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document and submit for approval, quality assurance/quality control procedures.

II.E.9.c.(3) For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I.Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

#### II.E.10. Retention of Records

The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the active life of the facility and for the post-closure care period.

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C.

File copies shall be kept for LDEQ inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

# II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

# II.E.12. Physical Facility after Modification

For a closed unit being modified, the Permittee may not manage hazardous waste in the modified portion of the closed unit until:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

# II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

#### II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.

# II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date (LAC 33:V.309.L.6).

#### II.E.16. Emergency Unauthorized Discharge Notification

In accordance with LAC 33:1.3915, in the event of an unauthorized discharge that results in an emergency condition (an emergency condition is any condition which could be reasonably expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property), the Permittee shall notify the DPS (Department of Public Safety) 24-hour Louisiana Emergency Hazardous Materials Hotline by telephone at (225) 925-6595 immediately, but in no case later than one (1) hour after learning of the discharge. The DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will subsequently notify the Department regarding the details of the discharge.

# II.E.17. Non-Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E and/or results in contamination of the groundwaters of the state but does not result in an emergency condition, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with the procedure and content requirements specified in LAC 33:I.3923.

# II.E.18. Unauthorized Discharge to Groundwater Notification

In accordance with LAC 33:I.3919, in the event of an unauthorized discharge resulting in contamination of groundwaters of the state by moving in, into, within or on any saturated subsurface strata, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC in accordance with the procedure and content requirements specified in LAC 33:I.3923.

# II.E.19. Written Notification Reports for Unauthorized Discharges

The Permittee shall submit written reports to the SPOC for any unauthorized discharges requiring notification under Conditions II.E.16, II.E.17 or II.E.18 of this permit. The written report shall be submitted in accordance with the procedure and content requirements specified in LAC 33:I.3925.

# II.E.20. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit not reported under Condition II.E.16 or Condition II.E.17 of this permit that may endanger the human health or the environment. This report shall include at minimum the following information:

II.E.20.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

II.E.20.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

II.E.20.b.(1) name, address, and telephone number of the owner or operator;

II.E.20.b.(2) name, address, and telephone number of the facility;

II.E.20.b.(3) date, time, and type of incident;

II.E.20.b.(4) name and quantity of materials involved;

II.E.20.b.(5) the extent of injuries, if any;

II.E.20.b.(6) an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

II.E.20.b.(7) estimated quantity and disposition of recovered material that resulted from the incident.

# II.E.21. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment not reported under Condition II.E.19 of this permit. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

# II.E.22. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.20 of this permit.

#### II.E.23. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

# II.E.24. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

# II.E.25. Schedule of Compliance

- II.E.25.a. Permittee must submit, within sixty (60) days after the effective date of the permit, an updated Groundwater Sampling and Analysis Plan, for approval that is consistent with Condition VI. Tables 2, 3, and 4 of this permit. Upon approval by the Administrative Authority, the Permittee will be required to do a Class 1 permit modification.
- II.E.25.b. Permittee must submit, within sixty (60) days after the effective date of the permit, a Notice of Intent to conduct corrective action using the CAS in accordance with Condition VIII.B.1.

# II.E.26. Additional Operating Standards

(RESERVED)

# II.E.27. Updated Documents to Be Submitted Prior to Operation

(RESERVED)

# II.E.28. Documents to Be Maintained at Facility Site

II.E.28.a. Until post-closure is completed and certified by an independent registered professional engineer, the Permittee shall maintain at the facility the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.

II.E.28.a.(1) (RESERVED). A waste analysis plan is not required for the unit in post-closure under this permit.

II.E.28.a.(2) A personnel training plan submitted in accordance with LAC 33:V.1515 (see Attachment 1).

II.E.28.a.(3) Contingency Plan submitted in accordance with LAC 33:V.1513 (see Attachment 1).

II.E.28.a.(4) Arrangements with local authorities in accordance with LAC 33:V.1511.G (see Attachment 1).

II.E.28.a.(5) Post-Closure Plan submitted in accordance with LAC 33:V.3523 and approved by the Administrative Authority, as well as any post-closure care requirements that may be required initially or through permit modifications in accordance with LAC 33:V.3523 (see Attachment 1).

II.E.28.a.(6) Cost estimate for facility post-closure care submitted in accordance with LAC 33:V.3709 and approved by the Administrative Authority, as well as any post-closure cost estimate that may be required initially or through permit modifications in accordance with LAC 33:V.3709 (see Attachment 1).

II.E.28.a.(7) Operating Records as required by LAC 33:V.1529 and 2115.D.

**II.E.28.a.(8)** Inspection plan developed in accordance with LAC 33:V.517.G and 1509.B and approved by the Administrative Authority (see Attachment 1).

**II.E.28.a.(9)** Security procedures developed in accordance with LAC 33:V.1507 (see Attachment 1).

II.E.28.a(10) Sampling and Analysis Plan developed in accordance with LAC 33:V. Chapter 33 (see Attachment 1).

II.E.28.b. All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

# II.E.29. Annual Report

An annual report shall be submitted covering all hazardous waste units and their activities during the previous calendar year as required by LAC 33:V.1529.D.

## II.E.30. Manifest

The Permittee shall report manifest discrepancies and unmanifested waste as required by LAC 33:V.309.L.8 and 9.

#### II.E.31. Emissions

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

# II.E.32. Water Discharges

Water discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

#### II.E.33. Non-Listed Hazardous Waste Facilities

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Closed Facilities). If the Permittee determines that an unpermitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E.23 of the General Permit Conditions.

# II.E.34. Compliance with Land Disposal Restrictions

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Conditions VII and VIII).

# II.E.35. Establishing Permit Conditions

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

# II.E.36. Obligation for Corrective Action

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII of this permit. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

# II.E.37. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. When applicable, the Permittee must modify the permit according to LAC 33:V.Chapter 3. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

### III. GENERAL POST-CLOSURE CONDITIONS

### III.A. DESIGN AND OPERATION OF THE POST-CLOSURE UNIT

III.A.1. The Permittee must maintain all facilities included in Condition IV, Table 1 to minimize the possibility of a fire, explosion, or any unauthorized sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or water that could threaten human health or the environment.

III.A.2. The Permittee must not manage any new wastes.

# III.B. REQUIRED NOTICE

(RESERVED)

## III.C. GENERAL WASTE ANALYSIS

Reserved as per Condition II.E.28.a.(1).

#### III.D. SECURITY

The Permittee must comply with the security provisions of LAC 33:V.1507, as referenced in Attachment 1.

# III.E. GENERAL INSPECTION REQUIREMENTS

The Permittee must follow the Inspection Plan referenced in Condition II.E.28.a.(8) and Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509.A and B, and 3523.B.

## III.F. PERSONNEL TRAINING

The Permittee must comply with the personnel training of LAC 33:V.1515, as referenced in Attachment 1.

# III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes.

# III.H. LOCATION STANDARDS

III.H.1. The Permittee has furnished evidence that it is in compliance with seismic standards as required by LAC 33:V.517.T.

III.H.2. The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC 33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by LDEQ prior to any hazardous waste and/or hazardous waste units being placed thereon.

# III.I. PRECIPITATION RUN-ON AND RUN-OFF

The Permittee must provide for the control by diversion or treatment of run-on and run-off resulting from a rainfall of at least twelve (12) inches, occurring during a period of twenty-four (24) hours in conformity with locally available records of a twenty-four (24) hour rainfall as per LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.2911.

# III.J. HURRICANE EVENTS

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

# HLK. PREPAREDNESS AND PREVENTION

# III.K.1. Required Equipment

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

# III.K.2. Testing and Maintenance of Equipment

The Permittee must test and maintain the equipment specified in Section III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

# III.K.3. Access to Communications or Alarm Systems

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.l and 1511.E.2.

# III.K.4. Arrangements with Local Authorities

The Permittee shall document in the annual report that the requirements of LAC 33:V.1511.G have been met. This documentation shall include those state and local agencies involved and those facilities and operations covered. Documentation of written arrangements with state and local agencies shall also be included in this report. Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal in the operating record.

#### III.L. CONTINGENCY PLAN

# III.L.1. Implementation of Plan

The Permittee must immediately carry out the provisions of the Contingency Plan (as referenced in Attachment 1), and follow the emergency procedures described by LAC 33:V.1513.F whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment.

# III.L.2. Copies of Plan

The Permittee must comply with the requirements of LAC 33:V.1513.C.

#### III.L.3. Amendments to Plan

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by LAC 33:V.1513.D.

# III.L.4. Emergency Coordinator

The Permittee must comply with the requirements of LAC 33:V.1513.E and 322.B.6 concerning the emergency coordinator.

# III.M. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 11.

#### III.N. RECORD KEEPING AND REPORTING

# III.N.1. Operating Record

Reserved as per Condition II.E.28.a.(7).

# III.N.2. Annual Report

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

# III.N.3. Operations Manual

Reserved as per Condition II.E.28.a.(7).

# III.O. POST-CLOSURE

#### III.O.1. Post-Closure Care

The Permittee must manage the Former Waste Lagoon System – Cell A in accordance with this permit, LAC 33:V. Chapter 35, Subchapter B and LAC 33:V.2521.

# III.O.2. Amendment to Post-Closure Permit

The Permittee must request modification to this post-closure permit when necessary, in accordance with LAC 33:V.3523.D. and LAC 33:V.321.

#### III.O.3. Post-Closure Maintenance

After final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period specified in LAC 33:V.3521.A.1. The Permittee must maintain all units in post-closure according to the requirements in Condition V.B.

#### III.O.4. Post-Closure Restrictions

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure care period when access by the public or domestic livestock may pose a hazard to human health.

# III.O.5. Post-Closure Property or Site Use

III.O.5.a. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority finds that the disturbance:

III.O.5.a.(1) is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

III.O.5.a.(2) is necessary to reduce a threat to human health or the environment.

III.O.5.b. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

#### III.O.6. Post-Closure Contact

The Permittee must provide the name, address, and phone number of the person or office to contact about the permitted post-closure units during the post-closure care period.

# III.O.7. Certification of Completion of Post-Closure Care

No later than sixty (60) days after completion of the established post-closure care period for the specified unit, the Permittee must submit to the Administrative Authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit(s) was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent registered professional engineer. Within sixty (60) days after receipt of the certification the Administrative Authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Administrative Authority has reason to believe that post-closure care was not conducted in accordance with the approved post-closure plan.

The certification of post-closure care shall include the certification statement found in the LAC 33:V.513.A or the current certification statement in the Louisiana hazardous waste regulations at the time of completion of post-closure care.

# HI.P. COST ESTIMATE FOR CARE OF THE POST-CLOSURE UNIT

- III.P.1. The Permittee must maintain a cost estimate for the permitted and associated structures as required by LAC 33:V.3709.
- III.P.2. The Permittee must maintain and adjust the post-closure cost estimate for inflation, as specified in LAC 33:V.3709.B, C, D, and for other circumstances that increase the cost of post-closure.
- III.P.3. The Permittee must base all post-closure cost estimates on the assumption that a third party contractor performs post-closure monitoring and maintenance in accordance with LAC 33:V.3709.A.
- III.P.4. The Permittee must consider the inventory and process conditions and their impact on the post-closure cost estimate for any re-submittal.
- III.P.5. During the life of the facility, the Permittee must keep, at the facility, its latest post-closure cost estimates, as necessary, to comply with LAC 33:V.3709.D.

# III.Q. FINANCIAL ASSURANCE FOR THE POST-CLOSURE UNIT

Throughout the post-closure care period, the Permittee must provide updates for its financial assurance mechanisms, as necessary, to comply with the provisions of LAC 33:V.3711.

# HI.R. LIABILITY REQUIREMENTS

(RESERVED)

# III.S. INCAPACITY OF THE PERMITTEE

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

# III.T. POST-CLOSURE NOTICES

If the Permittee or any subsequent Permittee of the land upon which this hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in LAC 33:V, Chapters 3 and 7. The Permittee must demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC 33:V, Subpart 1. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Administrative Authority approve either:

- III.T.1. the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or
- III.T.2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

# IV. PERMITTED CLOSED UNITS

This permit is applicable only to the unit known as the Former Waste Lagoon System-Cell A located on the property of Lion Copolymer Geismar LLC, Ascension Parish, Louisiana. This permit also applies to any appurtenances associated with the unit. The appurtenances are defined as any run-on/run-off control systems, leachate collection/leak detection systems, tanks, and/or piping and instrumentation associated with the regulated unit. If any additional appurtenances are added in the future, they would be addressed through a permit modification as required by regulation and this permit.

TABLE 1 INVENTORY AT CLOSURE

UNIT NAME	UNIT TYPE	CAPACITY
Former Waste Lagoon System-Cell A	Landfill	2.5 Acres

#### V. PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNIT

#### V.A. POST-CLOSURE CARE PERIOD

The post-closure care period will be in effect for the period of thirty (30) years, unless extended or shortened by the Administrative Authority, as specified in LAC 33:V.3521.A.1 and 2, Length of Post-Closure.

V.A.1. Former Waste Lagoon System- Cell A: Post-closure monitoring commenced in September, 1990.

#### V.B. POST-CLOSURE MAINTENANCE

After final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527 and Condition III.O of this permit, including maintenance and monitoring throughout the post-closure care period specified in the permit under Condition V.A and LAC 33:V.3521.A.1. The owner or operator must:

- **V.B.1.** for all permitted units, maintain the integrity and effectiveness of the final cover, including making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events;
- V.B.2. for all permitted units, maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.Chapter 33;
- V.B.3. for all permitted units, manage a run-on and run-off control system to prevent erosion at and other damage to the final cover;
- **V.B.4.** for all permitted units, maintain the cover with a final cover designed, constructed and maintained to:
  - V.B.4.a. provide long-term minimization of migration of liquids through the landfill;
  - V.B.4.b. function with minimal maintenance at all permitted units:
  - **V.B.4.c.** promote drainage and minimize erosion or abrasion of the final cover at all permitted units;
  - V.B.4.d. accommodate settling and subsidence, as necessary, so that the cover's integrity is maintained for all permitted units; and
  - **V.B.4.e.** have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present at the landfill.

V.B.5. The annual report shall include a Post-Closure Activity Report for the Former Waste Lagoon System-Cell A.

# V.C. POST-CLOSURE RESTRICTIONS

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure period when access by the public or domestic livestock may pose a hazard to human health.

### V.D. POST-CLOSURE USE OF PROPERTY

- V.D.1. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority find that the disturbance:
  - V.D.1.a. is necessary to the proposed use of the property and will not increase the potential hazard to human health or the environment; or
  - **V.D.1.b.** is necessary to reduce a threat to human health of the environment.
- V.D.2. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

# VI. GROUNDWATER PROTECTION

# VI.A. APPLICABILITY

The regulations of LAC 33:V, Chapters 3, 5, 15, 25, 33, 35, and 37, and Louisiana Hazardous Waste Control Law Revised Statute R.S., 30:2171 of the Environmental Quality Act, R.S., 30:2001 et seq., and the provisions of Condition VI shall apply to groundwater protection programs at the units identified in Condition IV, Table 1 of this permit. Accordingly, the units referenced in Condition IV, Table 1 of the permit are subject to post-closure groundwater monitoring.

All requirements of Condition VI must be satisfied and shall apply until the Administrative Authority has accepted the certification of completion of post closure care required by regulation and under Condition III.O.7 of this permit. This includes the compliance, closure, and post-closure care periods.

If groundwater contamination is confirmed as a result of operations related to past or present hazardous waste management facilities associated with this site, the Permittee shall establish, expand or continue, assessment and corrective action in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

# VI.B. REQUIRED PROGRAMS

The Permittee must continue to conduct a <u>Compliance Monitoring Program per Condition</u> <u>VI.I</u> using all existing systems necessary to comply with the monitoring specified herein and as stated in the most current approved Sampling and Analysis Plan. The Permittee must notify the Administrative Authority in accordance with the schedule specified in Conditions VI.I and VI.L, when any of the hazardous constituents or indicator parameters are detected in concentrations equal to or exceeding the designated limits at the point of compliance or upon first detection in any other monitoring well at the facility.

The Permittee must institute corrective action in all areas where groundwater has been affected by hazardous constituents or indicator parameters exceeding the assigned concentration limits. In the event evidence that the RECAP MO-1 concentration limits defined in Condition VI, Table 3 of this permit have been exceeded in any groundwater monitoring wells in Condition VI, Table 2 of this permit, the Permittee shall modify the permit in accordance with LAC 33:V.321 and Condition VI.J of this permit in order to establish a Corrective Action Program. Corrective action must continue uninterrupted to the fullest extent until groundwater problems are abated per the requirements of LAC 33:V.3321 and this requirement is terminated through permit modification in accordance with LAC 33:V.321 and 322, as applicable.

# VI.C. GROUNDWATER PROTECTION STANDARD

The groundwater protection standard shall be required during the Compliance Monitoring Program and/or Correction Action Program and is the concentration limit that shall indicate when corrective action must begin and when it may be terminated. The Administrative

Authority shall establish the groundwater protection standard when hazardous constituents from a regulated unit have been detected (as defined by LAC 33.V.3303.A.1) in the groundwater. The RECAP MO-1 concentration limits for each hazardous waste constituent specified in Condition VI, Table 3 shall serve as the groundwater protection standard.

Accordingly, the Permittee must comply with the conditions specified in this permit that are designed to ensure that hazardous constituents (Condition VI.D) detected (as defined by LAC 33.V.3303.A.1) do not exceed the concentration limits (Condition VI.D) in the uppermost permeable zones underlying the regulated units, beyond or below the point of compliance (Condition VI.E) during the compliance period (Condition VI.F).

The groundwater protection standard does not exempt the Permittee from required corrective action regarding contamination detected at wells not designated as point of compliance.

# VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents and concentration limits to which the groundwater protection standard of LAC 33:V.3305 apply are shown herein in Condition VI, Tables 2 and 3. The sampling frequency for the hazardous constituents is noted in Condition VI, Table 2.

# Condition VI, Table 2. RCRA Units, Point of Compliance and Monitoring Wells, Sampling Frequencies, and Analytical Parameters

Well	Zana	Tuna	Point of	Sampling	Parameters
wen	Zone	Type	i -		Tarameters
		-	Compliance	Frequency	
RN-	Zone	DG <sup>1</sup>	POC	Quarterly*/	Condition
06	III			Annual*	VI, Table 3
RN-	Zone	DG	POC	Quarterly*/	/ Table 4 of
07	III			Annual*	LAC
N-14	Zone	DG	POC	Quarterly*/	33:V.3325
	Ш			Annual*	
N-16	Zone	DG	POC .	Quarterly*/	
!	III			Annual*	
N-23	Zone	UG <sup>2</sup>		Quarterly*/	
	III			Annual*	
RN-	Zone	UG		Semiannual*	Condition VI,
08	III				Table 3
N-	Zone	UG		Semiannual*	
09R	III				
N-15	Zone	DG		Semiannual*	
	VIA				
N-19	Zone	DG		Semiannual*	
	III				
N-22	Zone	DG		Semiannual*	
	III	}		_	

<sup>\*</sup>The sampling frequency is quarterly/semi-annual (dependent upon well type) for Condition VI, Table 3 and one annual event for Table 4 of LAC 33.V.3325 for the post-closure monitoring network

DG = Down Gradient
UG = Up Gradient

# Condition VI, Table 3. Groundwater Monitoring Methods and Requirements.

Parameters	Analytical Method <sup>a</sup>	Estimated Practical Quantitation Limit (mg/l)	Maximum Concentration Limit <sup>b</sup>	Groundwater Protection Standard RECAP MO-1 Concentration Limit (µg/L) <sup>c</sup>
Standard Indicators 1	<del></del>			
рН	SM 4500H+B	Note <sup>d</sup>	Noted	
Specific Conductance	SM 2510B	Noted	Noted	
TOC	SM 5310B	Noted	Note <sup>d</sup>	
TOX	SW 846, 9020B			
Drinking Water Suitability				
Mercury	SW 846, 7470A	0.0002	Statistics	
Barium	SW846, 6010B	0.10	Statistics	
Groundwater Quality				
Chloride	SM 4500 CL E	1.0	Statistics	
Iron	SW846, 6010B	0.03	Statistics	
Manganese	SW846, 6010B	0.01	Statistics	
Sodium	SW846, 6010B	0.01	Statistics	
Sulfate	EPA 375.4	1.0	Statistics	
<b>Priority Pollutant Organics</b>				
Benzene	SW 846, 8270B	0.005	0.005	
Benzenethiol	SW 846, 8270C	0.010	0.010	
Benzothiazole	SW 846, 8270C	0.010	0.010	28,000
2(3H) Benzothiazolone	SW 846, 8270C	0.010	0.010	300,000
1, 1-Dichloroethane	SW 846, 8260B	0.005	0.007	
1, 2- Dichloroethane	SW 846, 8260B	0.005	0.005	
1, 1-Dichloroethene	SW 846, 8260B	0.005	0.007	
Methylene Chloride	SW 846, 8260B	0.005	0.005	
N-nitrosodiphenylamine	SW 846, 8270C	0.010	0.010	1,410
Toluene	SW 846, 8260B	0.005	0.005	

<sup>&</sup>lt;sup>a</sup> Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition (EPA Publication Number SW-846, 1986 as amended): must be in accordance with the latest edition of SW-846.

<sup>&</sup>lt;sup>b</sup> If the maximum allowable concentration limit is exceeded for any constituent, the Permittee must submit for approval a RECAP MO-1 Concentration Limit to serve as the groundwater protection limit for that constituent.

<sup>&</sup>lt;sup>c</sup> For the point of compliance wells only. If the Groundwater Protection Standard (RECAP MO-1 Concentration Limits) is exceeded for the listed constituents, Lion must develop a Corrective Action Monitoring program.

<sup>d</sup> These parameters are only being used for qualitative groundwater evaluation with no statistical evaluation. As such, no specific PQL is required other than method consistency.

Condition VI, Table 4. Sample Bottle and Preservation Specifications

PARAMETERS	CONTAINER TYPE	PRESERVATION METHOD	HOLDING TIME
Contamination Indicators			
рН	4 Ounce Plastic	Field Measurement	Immediately
Specific Conductance	4 Ounce Plastic	Field Measurement	28 days
TOC	4 ounce clear bottle	HCL	28 days
TOX	1-Liter Amber	Na <sub>2</sub> SO <sub>3</sub> and H <sub>2</sub> SO <sub>4</sub>	28 days
Drinking Water Suitability			
Mercury	500 ml Plastic	HNO <sub>3</sub> (for total only, unpreserved for dissolved)	28 days
Barium	500 ml Plastic	HNO <sub>3</sub> (for total only, unpreserved for dissolved)	6 months
Groundwater Quality			
Chloride	16 ounce clear bottle	None	28 days
Iron	500 ml Plastic	HNO <sub>3</sub> (for total only, unpreserved for dissolved)	6 months
Manganese	500 ml Plastic	HNO <sub>3</sub> (for total only, unpreserved for dissolved)	6 months
Sodium	500 ml Plastic	HNO <sub>3</sub> (for total only, unpreserved for dissolved)	6 months
Sulfate	16 ounce clear bottle	None	28 days
Priority Pollutant			
Organics			
Benzene	3, 40-ml VOA vials	HCL	14 days
Benzenethiol	2, 1-Liter Ambers	None	7 days
Benzothiazole	2, 1-Liter Ambers	None	7 days

<sup>&</sup>lt;sup>1</sup> Four replicates required; pH and specific conductivity to be recorded in the field upon collection.

PARAMETERS	CONTAINER TYPE	PRESERVATION METHOD	HOLDING TIME
2(3H) Benzothiazolone	2, 1-Liter Ambers	None	7 days
1,1 -Dichloroethane	3, 40-ml Vials	HCL	14 days
1,2 - Dichloroethanc	3, 40-ml Vials	HCL	14 days
1,1-Dichloroethene	3, 40-ml Vials	HCL	14 days
Methylene Chloride	3, 40-ml Vials	HCL	14 days
N- nitrosodiphenylamine	2, 1-Liter Ambers	None	7 days
Toluene	2, 1-ml Vials	HCL	14 days

#### VI.E. POINT OF COMPLIANCE

The point of compliance (POC) at which the groundwater protection standard of Condition VI.C applies, and at which monitoring must be conducted, are the vertical intervals intercepted by the wells identified in Condition VI, Table 2. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells. The vertical limit of compliance must be the uppermost aquifer.

When contamination is detected at or beyond the point of compliance for the regulated unit, additional monitoring must be conducted per Condition VI.I.6. This shall include the next vertical aquifer or permeable zone below the uppermost monitored zone. Until such time as hazardous constituents are no longer detected at the point of compliance and beyond, the groundwater quality at each monitoring well (e.g., point of compliance wells, plume defining wells and recovery wells) identified in Condition VI, Table 2 must be monitored. Additional monitoring wells will be installed, as required.

In the event that hazardous constituents or indicator parameters are detected at or beyond the point of compliance above the groundwater protection standard, the Permittee shall institute a Corrective Action Program per Condition VI.J. During the Corrective Action Program, the groundwater quality must be monitored in order to determine the effectiveness of the corrective action.

# VI.F. COMPLIANCE PERIOD

A compliance period is required when a Compliance Monitoring Program (Condition VI.I) and/or Corrective Action Program (Condition VI.J) is established. During the compliance period, the Permittee must determine whether the regulated units are in compliance with the groundwater protection standard at the point of compliance. The compliance period during which the groundwater protection standard of LAC 33:V.3305.A applies is until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7 of this permit.

If a Corrective Action Program has been implemented, the compliance period cannot end until after the Permittee has demonstrated that the corrective action has been effectively implemented

and the groundwater protection standard has not been exceeded for a period of three (3) consecutive years.

# VI.G. GENERAL REQUIREMENTS

- VI.G.1. The Permittee's groundwater monitoring system for the previously identified hazardous waste management units in Table 1 must consist of all wells as listed in Condition VI, Table 2, unless changed in the future by the Administrative Authority through permit modification.
- VI.G.2. The Permittee must maintain the structural and mechanical integrity and provide protection from accidental damage and surface infiltration for all wells (including piczometers) described in Condition VI, Table 2. The Permittee must implement a well inspection schedule and submit a written report to the Administrative Authority on any damage in accordance with Condition II.E.17 of this permit. A well cannot be abandoned unless exempted from the program at a later date by the Administrative Authority, or unless the integrity of the well is threatened. In such a case, the well must be replaced in conformance with a workplan approved by the Administrative Authority (see Condition VI.K Construction and Abandonment of Monitoring Wells and Geotechnical Boreholes).
- VI.G.3. Upgradient wells must always yield groundwater samples from the uppermost water bearing zone that are representative of groundwater that has not been affected by possible leakage from the regulated units. Downgradient and vertical point of compliance wells must yield groundwater samples from the water bearing zones that represent the quality of groundwater beneath the units that flows to the points of compliance.
- VI.G.4. Each well must be measured for total depth and depth to water on the same day and prior to purging. Measurements must be to the nearest 0.1 foot. If 10% of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event.
- VI.G.5. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The wells must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Other evacuation techniques (e.g., micro-purging) must be approved by the Administrative Authority prior to use. Purging methods must be consistent throughout the monitoring period.
- VI.G.6. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically alter or influence the sample. Sampling devices other than bailers must be approved by the Administrative Authority prior to use. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the monitoring period.

- VI.G.7. Groundwater samples shall be monitored and analyzed for turbidity. Samples containing less than five (5) NTU (nephelometric turbidity unit) are acceptable for analysis when the analytical method is sensitive to turbidity (such as the analysis of metals). Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified geologist as "the best obtainable". An evaluation of turbidity must accompany all potentially affected analytical values.
- VI.G.8. Standard indicators (e.g., specific conductance, pH, etc.) listed in Condition VI, Table 3 must be measured and will be used to indicate well integrity and possible groundwater contamination.
- VI.G.9. A chain of custody protocol must be employed that will allow for tracking possession and handling of samples from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the required analytical tests.
- VI.G.10. Sample preservation, handling and analysis must meet of the specifications of LAC 33:V.3315.D and 3315.E and Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3<sup>rd</sup> Edition (EPA Publication Number SW-846, as amended) or an equivalent substitute (approved by the Administrative Authority prior to implementation). Containers, preservation methods and analytical limits are listed in Condition VI, Table 4 of this permit.
- VI.G.11. The Permittee must use one of the statistical procedures outlined in the most current approved facility Sampling and Analysis Plan or LAC 33:V.3315.H in determining whether concentrations have been exceeded for the hazardous constituents specified in Condition VI, Table 3.
- VI.G.12. Records of all sampling and analytical work must be maintained at the site during the life of the units, including the post-closure care period. An up-to-date field log book (or compilation of field sheets) must be kept at the site which documents, as a minimum, the following for each sample:
  - well identification number;
  - total well depth;
  - elevation of top of casing;
  - water elevations;
  - calculations of the standing water volume in the well;
  - water color (visual) and odor;
  - field measurements and methods (pH, specific conductance, etc.);
  - well evacuation procedures and equipment;
  - total volume of water evacuated;
  - sample withdrawal procedures and equipment;
  - name of collector, sample date and time;
  - sample identification numbers; and
  - other field observations.

VI.G.13. Reporting and notification requirements shall be in accordance with Condition VI.L.

# VI.H. DETECTION MONITORING PROGRAM

RESERVED- Permittee currently in the Compliance Monitoring Program as per Condition VI.I.

# VI.I. COMPLIANCE MONITORING PROGRAM

The Permittee must conduct a Compliance Monitoring Program in accordance with LAC 33:V.3319 and as subsequently directed by the Administrative Authority. A Compliance Monitoring Program is required whenever hazardous constituents have been detected at the point of compliance for a regulated unit. The Permittee must continue or expand the Compliance Monitoring Program until one of the following occurs: 1) compliance with the groundwater protection standard is achieved for at least three (3) years (at that time, the Permittee must notify the Administrative Authority in writing, and upon approval submit a permit modification application to reestablish a Detection Monitoring Program); or 2) a Corrective Action Program is established with adequate monitoring as delineated in Condition VI.J and LAC 33:V.3321.D, and the permit is modified accordingly.

# VI.I.1. Quarterly Monitoring for Determining Compliance with the Groundwater Protection Standard

The Permittee must utilize the groundwater monitoring system outlined in Conditions VI.B through VI.G and as required by LAC 33:V.3315 to monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard. Accordingly, the Permittee shall determine the concentration of each hazardous constituent and indicator parameter listed in Condition VI, Table 3 of this permit at least semi-annually from groundwater in the wells listed in Condition VI, Table 2 of this permit.

VI.I.2. The Permittee must determine whether there is statistically significant evidence of contamination above the groundwater protection standard for any hazardous constituent or indicator parameter specified in Condition VI.D. Statistical methods shall conform to Condition VI.G.11 and shall be completed within sixty (60) days of the groundwater monitoring event.

VI.I.3. If the Permittee determines, pursuant to Condition VI.I.2, that there is statistically significant evidence of contamination above the groundwater protection standard for any hazardous constituent and or indicator parameter, the Permittee must do the following:

VI.I.3.a. notify the Administrative Authority in writing within seven (7) days of this finding. The notification must indicate the constituent(s) which have been exceeded and their respective concentration limit(s); and

VI.1.3.b. submit an application for a permit modification to establish a Corrective Action Program meeting the requirements of LAC 33:V.3321 within 180 days (or ninety (90) days if the Permittee has previously submitted a certified engineering feasibility study under LAC 33:V.3317.G.5.b). The application must include the following information:

VI.I.3.b.(1) a detailed description and schedule for additional monitoring and corrective action that will achieve compliance with the groundwater protection standard specified in Conditions VI.C and VI.D of this permit; and

VI.I.3.b.(2) a geotechnical plan (certified by a qualified geologist or a geotechnical engineer) to demonstrate the effectiveness of the planned corrective action. This plan may incorporate the Compliance Monitoring Program developed to meet the requirements of this permit, except that the Permittee will be required to also monitor as frequently as necessary to demonstrate the effectiveness of the corrective action.

VI.I.4. If the Permittee determines, pursuant to Condition VI.I.2, that there is statistically significant evidence of contamination above the groundwater protection standard for any hazardous constituent or indicator parameter, the Permittee may demonstrate that a source other than a regulated unit caused the contamination, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation, or natural variation in the groundwater. The Permittee may make a demonstration under this Condition in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified in Condition VI.I.3.b unless the demonstration made under this Condition successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Condition, the Permittee must:

VI.I.4.a. Notify the Administrative Authority in writing within seven (7) days that the Permittee intends to make a demonstration under this Condition;

VI.I.4.b. Within ninety (90) days, submit a report to the Administrative Authority which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standard resulted from an error in sampling, analysis or evaluation;

VI.I.4.c. Within ninety (90) days, submit to the Administrative Authority an application for a permit modification to make any appropriate changes to the Compliance Monitoring Program; and

VI.I.4.d. Continue to monitor in accordance with the Compliance Monitoring Program established under this permit.

# VI.I.5. Annual Monitoring for LAC 33:V.3325, Table 4 Constituents

The Permittee must utilize the groundwater monitoring system outlined in Conditions VI.B through VI.G and as required by LAC 33:V.3315 to monitor the groundwater to determine whether hazardous constituents listed in LAC 33:V.3325, Table 4 are present in the uppermost aquifer (and, if so, at what concentration). Accordingly, the Permittee shall determine the concentration of each hazardous constituent listed in LAC 33:V.3325, Table 4 annually from all point of compliance wells listed in Condition VI, Table 2 of this permit.

VI.I.5.a. The Permittee must determine whether there is statistically significant evidence of additional hazardous constituents not previous identified. Statistical methods shall conform to Condition VI.G.11 and shall be completed within sixty (60) days of the groundwater monitoring event.

Should results indicate that additional hazardous constituents are present, the Permittee may either resample for any of the constituents pursuant to Condition VI.I.5.b or report these additional constituents to the Administrative Authority and add them to the monitoring list and modify the permit pursuant to Condition VI.I.5.c.

VI.I.5.b. If the Permittee finds LAC 33:V.3325, Table 4 constituents in the groundwater that are not already identified in the permit as monitoring constituents, the Permittee may indicate in the report to the Administrative Authority (Condition VI.I.5.a) that the Permittee intends to re-sample and repeat LAC 33:V.3325, Table 4 analysis. This re-sampling must be performed within one month of the report submittal (Condition VI.I.5.a). The Permittee must report the concentrations of these additional constituents to the Administrative Authority within sixty (60) days of the groundwater monitoring event. Should results indicate that additional hazardous constituents are present, the Permittee must add them to the monitoring list and modify the permit pursuant to Condition VI.I.5.c.

VI.I.5.c. The Permittee must submit a permit modification application to add the additional constituents to Condition VID Table 3 and Table 4 of this permit in accordance with LAC 33:V.321 and Condition II.C of this permit.

# VI.I.6. Additional Monitoring Requirements

As part of the Compliance Monitoring Program, the plume must be defined and monitored by additional monitoring wells (a.k.a., assessment, plume defining, downgradient monitor wells, etc.) to satisfy LAC 33:V.3315.A.3.

VI.I.6.a. The additional monitoring wells listed in Condition VI, Table 2 must be sampled according to a frequency approved by the Administrative Authority

(semi-annually), as part of the on-going evaluation of the plume, for constituents specified in Condition VI, Table 3.

VI.I.6.b. If the Permittee determines that there is statistically significant evidence of contamination for hazardous constituents or indicator parameters at any downgradient well <u>previously reported as non-detect</u>, the Permittee must notify the Administrative Authority of the finding in writing within seven (7) days. This notification must indicate what hazardous constituents or indicator parameters have shown statistically significant evidence of contamination. Further, the Permittee must do one of the following:

VI.I.6.b(1) Submit a workplan to the Administrative Authority within ninety (90) days from the date of the confirmation of contamination. The workplan must detail the specific additional assessment procedures the Permittee will conduct to identify the full extent of the plume. The workplan shall include any proposed changes to the groundwater monitoring system, monitoring frequency, sampling and analysis procedures and methods, and/or statistical methods; or

VI.I.6.b(2) Demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Paragraph in addition to, or in lieu of, submitting an assessment workplan; however, the Permittee is not relieved of the requirement to submit an assessment workplan within the time specified unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph the Permittee must:

VI.I.6.b(2)(a) Specify the Permittee's intention to make a demonstration under this Paragraph when notifying the Administrative Authority of the statistically significant evidence of contamination;

VI.I.6.b(2)(b) Within ninety (90) days, submit a report to the Administrative Authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation. Further, the Permittee must submit an application for a permit modification to make any appropriate changes to the monitoring program; and

VI.I.6.b.(2).c. Continue to monitor in accordance with the monitoring program established under this permit.

# VI.I.7. Changes to the Compliance Monitoring Program

If the Permittee determines that the Compliance Monitoring Program no longer satisfies the requirements of this permit, the Permittee must within ninety (90) days submit an application for a permit modification to make any appropriate changes to the program.

Any time the Administrative Authority determines that the Compliance Monitoring Program does not satisfy the requirements of this permit, the Permittee shall, within ninety (90) days of notification of such determination, submit an application for a permit modification to make any appropriate changes to the program.

# VI.J. CORRECTIVE ACTION PROGRAM

(RESERVED - The Permittee currently is in the Compliance Monitoring Program as per Condition VI.I. The requirements of VI.J [in italics] are included for informational purposes only and are meant to provide a course of action in the event a Corrective Action Program is required. In the event a Corrective Action Program is required, the permit will be modified in accordance with LAC 33:V.321 and Condition VI.I of this permit and the requirements of VI.J will become enforceable.)

A Corrective Action Program is required whenever the groundwater protection standard has been exceeded at or beyond the point of compliance for a regulated unit. The Permittee must continue or expand the Corrective Action Program in accordance with the requirements of LAC 33:V.3321 and as subsequently directed by the Administrative Authority to the fullest extent until groundwater problems are abated. The Corrective Action Program shall be initiated and completed by the Permittee within a period of time specified by the Administrative Authority and until such time as this requirement is terminated through permit modification.

# VI.J.1. Corrective Action Objectives

The Corrective Action Program must:

VI.J.1.a. protect human health and the environment;

VI.J.1.b. attain compliance with the groundwater protection standard as specified in Condition VI.C;

VI.J.1.c. control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of hazardous constituents or indicator parameters into the environment that may pose a threat to human health or the environment;

VI.J.1.d. meet applicable statutory and regulatory requirements; and

VI.J.1.e. meet acceptable waste management requirements.

# VI.J.2. Implementation and Monitoring of the Corrective Action Program

The Permittee must implement the Corrective Action Program according to the approved Corrective Action Plan and schedule contained therein.

VI.J.2.a. The Permittee must conduct groundwater monitoring as described in the approved corrective action plan. The groundwater monitoring program:

VI.J.2.a.(1). may be based upon the requirements of the Compliance Monitoring Program (Condition VI.I);

VI.J.2.a.(2). must be as effective as the Compliance Monitoring Program in determining compliance with the groundwater protection standard; and

VI.J.2.a.(3). must indicate the effectiveness of the corrective action and have ongoing assessment monitoring.

VI.J.2.b. The Permittee must evaluate and report the effectiveness and progress of the corrective action semi-annually to the Administrative Authority as required by LAC 33:V.3321.G and in accordance with Condition VI.L.1.o. The evaluation shall include the following:

VI.J.2.b.(1). general discussion on the effectiveness of the corrective action in achieving the corrective action goals, and progress being made toward completion;

VI.J.2.b.(2). trend analysis and updated schedule for completion of the corrective action;

VI.J.2.b.(3). evaluation of performance reliability, ease of implementation and any encountered concerns or problems;

VI.J.2.b.(4). any changes to surrounding land use or environmental receptors that may impact effectiveness;

VI.J.2.b.(5). recommendations for improvement;

VI.J.2.b.(6). recovered amounts for each component of a recovery system (e.g., recovery wells, French drain systems, etc.) and the entire system; recovered amounts for both contaminants and all liquids; recovered amounts for both the reporting period and since recovery implementation; and

VI.J.2.b.(7). graphical and statistical analyses, as necessary, to demonstrate the effectiveness and progress (the Administrative Authority

may also require predictive computer modeling, as per LAC 33:V.3303.D).

# VI.J.3. Revisions to the Corrective Action Program

If the Permittee determines that the Corrective Action Program (including monitoring) no longer satisfies the requirements of this permit, the Permittee, within ninety (90) days, shall submit an application for a permit modification to make any appropriate changes to the program.

Any time the Administrative Authority determines that the Corrective Action Program does not satisfy the requirements of this permit, the Permittee shall, within ninety (90) days of notification of such determination, submit an application for a permit modification to make any appropriate changes to the program.

# VI.J.4. Completion of Corrective Action Program

If the Permittee is conducting corrective action at the end of the compliance period, the Permittee must continue for as long as necessary to achieve compliance with the groundwater protection standard. The Corrective Action Program may be terminated when the groundwater protection standard is being met at the point of compliance and throughout the entire zone affected by the release for at least three (3) consecutive years.

VI.J.4.a. The Permittee must demonstrate to the satisfaction of the Administrative Authority that the groundwater protection standard is being met.

VI.J.4.b. Upon successful demonstration from the Permittee that the corrective action should be terminated, the Permittee must submit to the Administrative Authority an application for permit modification pursuant to LAC 33:V.321. The application will include provisions to establish either a Detection Monitoring Program or Compliance Monitoring Program on a schedule approved by the Administrative Authority.

VI.J.4.c. Upon modification of the permit, the Permittee shall be released from the requirements for financial assurance for corrective action under LAC 33:V.3301.B.

# VI.K. CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The construction and abandonment of groundwater monitoring wells must conform to the standards and guidelines specified in "CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK", dated May 1993 ("Construction Handbook", May 1993). This document is printed by and available from the Louisiana Department of Transportation and Development (DOTD), Water Resources Section, P.O. Box 94245, Baton Rouge, Louisiana 70804-9245.

VI.K.1. A workplan for the construction of a new well must be submitted to the Administrative Authority for approval as the entire groundwater monitoring system must be approved. Any required new well should be installed within thirty (30) days of approval of the workplan by the Administrative Authority. Upon completion of new or replacement well, a copy of DOTD-GW-1 S, DOTD Well Registration Short Form, is to be provided to the Administrative Authority.

VI.K.2. The Permittee must provide for the sealing of any vertical migration path resulting from exploratory boring, leachate collection or detection systems and/or groundwater monitoring programs as provided in LAC 33:V.3323. A workplan for the plugging and abandonment of a well must be submitted for approval by the Administrative Authority, whenever such migration pathways are discovered. Upon completion of well abandonment, a copy of DOTD-GW-2, DOTD Well Plugging and Abandonment Form, is to be provide to the Administrative Authority.

# VI.L. REPORTING AND NOTIFICATION REQUIRMENTS

# VI.L.1. Quarterly and Semi-Annual Groundwater Reports

A quarterly groundwater report for the point of compliance wells must be submitted to the Administrative Authority for each three-month period. A semi-annual groundwater report must be submitted for all wells listed in Condition VI, Table 2 to the Administrative Authority for each six-month period. The reports shall include the following:

- VI.L.1.a. a general discussion on sampling, analytical, statistical and QA/QC procedures;
- VI.L.1.b. a table showing well number, well depth, interval screened, zone monitored, well diameter, screen and casing material (and the type of pump, if applicable) for all wells;
- VI.L.1.c. a facility map showing all wells (up-gradient, point of compliance, assessment, plume defining and recovery) and identifying zones in which wells are screened;
- VI.L.1.d. a scaled potentiometric surface map showing well locations, groundwater elevations with respect to mean sea level for each monitored zone;
- VI.L.1.e. documentation of the chain of custody of all sampling and analyses;
- VI.L.1.f. all analytical data, including QA/QC;
- VI.L.1.g. a tabular summary of all analytical data;

VI.L.1.h. a statistical method shall be used in evaluating data for each required indicator parameter (e.g., pH, specific conductance, total organic carbon, total organic halogen) and hazardous constituent, as approved by the Administrative Authority;

VI.L.1.i. tables and graphical representation of the values of the required indicator parameters and the hazardous constituents including:

VI.L.1.i.(1). contaminant concentration isopleth maps;

VI.L.1.i.(2). contaminant concentration versus time graphs;

VI.L.1.j. a statement of whether a statistically significant difference in concentration is detected;

VI.L.1.k. a discussion of any significant changes in the data from the last reporting period;

VI.L.1.1. a discussion of inspections and maintenance of the groundwater monitoring system, physical condition of the wells, including down time for any well or part of the system and actions taken to return the system to normal operations and maximum efficiency;

VI.L.1.m. a discussion of water-quality properties (i.e., color, odor, etc.);

VI.L.1.n. disposition of purge water and other potentially contaminated materials; and

VI.L.1.o. evaluation of the effectiveness and progress of any corrective action according to Condition VI.J.2.b.

# VI.L.2. Annual Groundwater Report

An annual groundwater report must be submitted to the Administrative Authority no later than March 1<sup>st</sup> of the following calendar year as required by LAC 33:V.1529.D.8.

VI.L.2.a. The report must contain the reporting requirements of Condition VI.L.1 for the final quarterly and semi-annual sampling periods.

VI.L.2.b. In addition, the report must summarize and interpret all groundwater activities for the preceding calendar year including an evaluation of the monitoring strategy in relation to the direction of groundwater flow and locations of wells associated with the units. Applicable calculations must also include groundwater flow rates, contaminant migration rates (as applicable), statistical comparisons, trend analyses, and any other pertinent information regarding the adequacy of the monitoring system.

# VI.L.3. Notification of Statistically Significant Evidence of Contamination

The Permittee must notify the Administrative Authority in accordance with Conditions VI.H, VI.I or VI.J when there is statistically significant evidence of contamination for hazardous constituents or indicator parameters.

# VI.L.4. Notification of Release to SPOC

In the event of a release in, into, within, or on any groundwaters of the state, (i.e., any confirmation of contamination in any previously uncontaminated saturated subsurface strata) the Permittee must notify the Department within twenty-four (24) hours of confirming statistically significant evidence of a release. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with LAC 33:309.L.7 and Condition II.E.16 of this permit. This requirement is in addition to notification requirements to the Administrative Authority discussed in Conditions VI.H, VI.I or VI.J.

# HAZARDOUS AND SOLID WASTE AMENDMENTS

# VII. GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS

### VII.A. STANDARD CONDITIONS

### VII.A.1. Waste Minimization

Annually, by March 1, for the previous year ending December 31, the Permittee shall enter into the operating record as required by LAC 33:V.1529.B.19, a statement certified according to LAC 33:V.513.A specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage, or practicable disposal method that is currently available to the Permittee minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following criteria should be considered for the program:

- VII.A.1.a. Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;
- VII.A.1.b. Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;
- VII.A.1.c. An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;
- VII.A.1.d. Factors that have prevented implementation of source reduction and/or recycling;
- VII.A.1.e. Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);
- VII.A.1.f. An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;
- VII.A.1.g. A flow chart or matrix detailing all hazardous wastes the facility produces by quantity, type, and building/area;

VII.A.1.h. A demonstration of the need to use those processes that produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste;

VII.A.1.i. A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed;

VII.A.1.j. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and

VII.A.1.k. The Permittee may meet the requirements for waste minimization by developing an Environmental Management System according to the EPA document, <u>Integrated Environmental Management System Implementation Guide</u>, EPA 744-R-00-011, October 2000, found on <a href="https://www.epa.gov/opptintr/dfe/pubs/iems/iems\_guide/index.htm">www.epa.gov/opptintr/dfe/pubs/iems/iems\_guide/index.htm</a>.

# VII.A.2. Dust Suppression

Pursuant to LAC 33:V.4139.B.4, and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

# VII.A.3. Failure to Disclose

The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts at any time may be cause for termination or modification of this Permit in accordance with LAC 33:323.B.2 and 3.

# VII.A.4. Suspension, Modification, or Revocation and Reissuance, and Termination of Permit

This Permit may be modified, revoked and reissued, or terminated for cause as specified in LAC 33:V.323. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

VII.A.4.a. If the Administrative Authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C. or 323, a draft permit shall be prepared incorporating the proposed changes. The Administrative Authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application.

VII.A.4.b. The Permittee may initiate permit modification proceedings under LAC 33:V.321.C. All applicable requirements and procedures as specified in LAC 33:V.321.C shall be followed.

VII.A.4.c. Modifications of this Permit do not constitute a reissuance of the Permit.

### VII.A.5. Permit Review

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in LAC 33:V.321.C. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

# VII.A.6. Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA except for those requirements not included in the permit which:

VII.A.6.a. Become effective by statute;

VII.A.6.b. Are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

VII.A.6.c. Are promulgated under LAC 33:V.Chapters 23, 25 and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, construction quality assurance (CQA) programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

# VII.A.7. Specific Waste Ban

VII.A.7.a. The Permittee shall not place in any land disposal unit the wastes specified in LAC 33:V. Chapter 22 after the effective date of the prohibition unless the Administrative Authority has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

VII.A.7.b. The Permittee may store wastes restricted under LAC 33:V.Chapter 22 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of LAC 33:V.2205 including, but not limited to, clearly marking each tank or container.

VII.A.7.c. The Permittee is required to comply with all applicable requirements of LAC 33:V.2245 as amended. Changes to the Waste Analysis Plan will be considered permit modifications at the request of the Permittee, pursuant to LAC 33:V.321.C.

VII.A.7.d. The Permittee shall review the Waste Analysis Plan and analyze the waste when a process changes to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record pursuant to Condition III.C.1 and 2.

# VII.A.8. Information Submittal for the Corrective Action Strategy

Failure to comply with any condition of the Permit, including information submittals, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (LAC 33:V.323.B.3).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required by this Permit using the Corrective Action Strategy are signed and certified in accordance with LAC 33:V.Chapter 5, Subchapter B. All submittals required under the Corrective Action Strategy must conform to those requirements outlined in the RECAP (see Condition VIII of this permit). Variance from content and/or formatting guidelines provided under the RECAP shall be requested by the Permittee prior to submittal to the Administrative Authority, as deemed necessary. Approval or disapproval of such a request with further guidance on content and formatting will be provided by the Administrative Authority, as deemed necessary. Five (5) copies each of these plans, reports, notifications or other submissions and one (1) electronic copy (3.5" IBM compatible disk or CD-ROM) of all portions thereof which are in word processing format shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

Louisiana Department of Environmental Quality Office of Environmental Assessment Environmental Technology Division P.O. Box 4314 Baton Rouge, LA 70821-4314

A summary of the planned reporting milestones pursuant to the corrective action requirements of this Permit is found in Condition VIII, Table 1.

# VII.A.9. Data Retention

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken

pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

# VII.A.10. Management of Wastes

All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. As a response to the Louisiana Legislature mandate La. R.S. 30:2272 (Act 1092 of the 1995 Regular Session) to develop minimum remediation standards, the LDEQ promulgated the Risk Evaluation Corrective Action Program (RECAP). RECAP's tiered approach to risk evaluation and corrective action establishes not only across the board numerical standards for most media, but also allows for the development of more site-specific numerical standards, as warranted. The Permittee is required to comply with all applicable requirements of RECAP. Approval of units for managing wastes and conditions for operating the units shall be granted through the permitting process.

VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB AIR REGULATIONS)

(RESERVED)

VII.C. SPECIFIC CONDITION - CLOSURE

(RESERVED)

# VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS—CORRECTIVE ACTION STRATEGY

Corrective Action for Releases: Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA), and LAC 33:V.3322 require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of when the waste was placed in the unit.

EPA's traditional RCRA corrective action approach is structured around several elements common to most activities. In the first phase, RCRA facility assessment (RFA), EPA or the authorized state assesses the facility to identify releases and determine the need for corrective action. In the second phase, RCRA facility investigation (RFI), the facility conducts a more detailed investigation to determine the nature and extent of contaminants released to ground water, surface water, air, and soil. If remedial action is needed, a third phase, corrective measures study (CMS), is started. During this phase, the facility conducts a study, which when completed, describes the advantages, disadvantages, and costs of various cleanup options. After selection of a final remedy, the fourth phase, corrective measures

implementation (CMI), is initiated. The facility is required to design, construct, operate, maintain, and monitor the final remedy(s).

The Corrective Action Strategy (CAS) is an alternate corrective action approach that can be implemented during any phase of corrective action for a release area. The Permittee shall use the CAS approach as the framework for corrective action to clarify, facilitate and expedite the process, and shall use the Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP) for screening and media-specific cleanup standards. EPA has interpreted the term "release" to mean, "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." (50 FR 2873, July 15, 1985). The CAS refers to "release areas" as solid waste management units (SWMUs) and areas of concern (AOCs) while the RECAP refers to release areas as areas of investigation (AOIs). SWMUs and AOCs may also be referred to as "AOIs" when investigated and managed under the RECAP.

# VIII.A. ALTERNATE CORRECTIVE ACTION

### VIII.A.1. Introduction to the CAS

This Permit will utilize the CAS Guidance Document (www.epa.gov/Arkansas/6pd/rcra c/pd-o/riskman.htm) developed by the U.S. Environmental Protection Agency (EPA) Region 6 whenever the Administrative Authority determines that it will serve to facilitate the corrective action. The CAS Guidance Document shall be utilized to the fullest extent practicable for planning and implementation of the corrective action. The CAS in this Permit shall not supersede existing Federal, State, and local regulations. The two primary objectives are to prioritize corrective action at the facility, and streamline corrective action administrative procedures, resulting in the protection of human health and the environment.

The CAS is a performance-based approach; using data quality objectives, investigations begin with the endpoint in mind. The CAS is a risk management strategy that can be implemented during any phase of corrective action. However, the CAS need not be applied to work that has already been completed to the satisfaction of the Administrative Authority. Performance standards are established at the beginning of the corrective action process, allowing earlier and more focused implementation. Releases are screened using RECAP screening numbers to determine the priority of corrective action, and remedial alternatives are selected on the basis of their ability to achieve and maintain the established performance standards.

There is no one specific path through the CAS process. The CAS is a facility-wide approach, focusing corrective action on releases that pose the greatest risk first. Screening releases will also enable some areas of interest to qualify for no further action at this time (Condition VIII.A.3.a.), thus resources can be used to best benefit the protection of human health and the environment. The CAS process also considers activities previously conducted under the traditional corrective action process. Appendix 1 of this permit contains a summary of corrective action activities

completed to date and also describes where the Permittee is in the CAS process at the time of issuance of this permit. The applicability of various provisions of the CAS will depend on where the Permittee is in the CAS process as detailed in Appendix 1.

The traditional RCRA corrective action process and reports (i.e., RFIs, CMSs, CMIs, etc.) are not elements of the CAS. However, the use of information and reports from the traditional corrective action process, if available, is encouraged, in addition to new site-specific information.

The Administrative Authority, through an agency-initiated permit modification, may remove the CAS as the means of facility-wide corrective action in the case of the failure of the Permittee to disclose information, abide by the terms and conditions of this permit, adhere to agreed schedules, or show adequate progress; or should an impasse occur between the Permittee and the Administrative Authority. The Administrative Authority will institute other means of corrective action (such as traditional corrective action) at the facility through modification of this permit.

# VIII.A. 2. Performance Standards

Expectations for the outcome of corrective action at a facility are established in the CAS by three performance standards as defined in Conditions VIII.A.2.a through c. The Permittee's proposed performance standards shall be presented during the scoping meeting. The Permittee must justify the proposed performance standards through evaluation and documentation of land use, ground water designation (current and reasonably expected future use), types of receptors present, exposure pathways, etc.; as described in RECAP, Chapter 2. Through the application of the performance standards and RECAP, the Permittee and Administrative Authority shall determine whether a release must be addressed through corrective action, and whether implemented corrective actions are protective of human health and the environment.

The Permittee shall submit the performance standards in writing along with the Conceptual Site Model (Condition VIII.D) within one-hundred and twenty (120) days after the scoping meeting. The Administrative Authority may either approve the performance standards proposed by the Permittee or establish performance standards that the Administrative Authority deems necessary to protect human health and the environment.

The three CAS performance standards are defined below. The order in which the performance standards are listed does not indicate that one performance standard takes priority over another. All applicable performance standards must be achieved by the Permittee.

# VIII.A.2.a. Source Control Performance Standard

Source control refers to the control of materials that include or contain hazardous wastes or hazardous constituents that act as a reservoir for

migration of contamination to soil, sediment, ground water, surface water, or air, or as a source for direct exposure.

The facility must determine if source material is present. Removal, containment, treatment, or a combination of the three, must be evaluated on a case-by-case basis. Controlling source material is a predominating issue in the CAS, and must be addressed to ensure protectiveness over time. Prioritization of the SWMUs and AOCs does not mean avoidance of controlling source materials.

# VIII.A.2.b. Statutory and Regulatory Performance Standard

Applicable statutory and regulatory requirements (Federal, State, and local) must be identified. These requirements may dictate media-specific contaminant levels (e.g., maximum contaminant levels (MCLs) in drinking water) that must be achieved and may become a performance standard for the Permittee.

### VIII.A.2.c. Final Risk Goal Performance Standard

The final risk goal is the level of protection to be achieved and maintained by the Permittee. The final risk goal shall be based on site-specific issues including land use, special subpopulations, contaminant concentrations based on acceptable risk, location at which the levels are measured, and the remediation time frame, as specified by RECAP.

One final risk goal may apply to the entire facility, but it is more likely that different releases will require different final risk goals due to variations in location of releases, land use, proximity of receptors, etc. The final risk goal will be based on sound risk assessment methodologies (Condition VIII.A.3).

# VIII.A.3. Use of RECAP

The latest edition of the RECAP document shall be used by the Permittee to determine the need for further corrective actions under this permit. The RECAP consists of a tiered framework comprised of a Screening Option (SO), and three Management Options (MO). The tiered management options allow site evaluation and corrective action efforts to be tailored to site conditions and risks. As the MO level increases, the approach becomes more site-specific and hence, the level of effort required to meet the objectives of the Option increases.

RECAP shall be used by the Permittee to evaluate data quality and data usability (RECAP Section 2.4 and 2.5), to determine the identity of an AOI as described in RECAP Section 2.6, and for estimations of Area of Investigation Concentrations and Groundwater Compliance Concentrations for each media as defined in RECAP Section 2.8.

RECAP shall be used by the Permittee to evaluate land use as described in RECAP Section 2.9, and groundwater/aquifer use as described in RECAP Section 2.10.

RECAP shall be used by the Permittee to prioritize AOCs, SWMUs, and AOIs that require remediation so site investigations are focused on the release areas that pose the greatest risk. As the CSM is compiled, the Permittee shall assess historical data (RECAP Section 2.5) and use the following management options, as appropriate, to address each release site.

VIII.A.3.a. Use of the Screening Option - The Permittee shall use the Screening Standards (SS) which are LDEQ-derived screening numbers for soil and groundwater for non-industrial and industrial land use scenarios. The SS shall be used to demonstrate that an AOI does not pose a threat to human health and the environment and, hence does not require further action at this time (NFA-ATT) or that further evaluation is warranted under a higher Management Option.

VIII.A.3.b. Use of Management Option 1 – The Permittee shall use Management Option 1 (MO-1) which provides a RECAP standard (RS) derived for non-industrial and industrial exposure scenarios using currently recommended default exposure parameters and toxicity values. Under MO-1, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-1 limiting RS, then the Permittee may; (1) remediate to the MO-1 limiting RS (and comply with closure/post closure requirements for MO-1), or (2) proceed with a MO-2 or MO-3 evaluation.

VIII.A.3.c. Use of Management Option 2 — The Permittee shall use Management Option 2 (MO-2) which provides for the development of soil and groundwater RS using site-specific data with specified analytical models to evaluate constituent fate and transport at the AOI. The results of this evaluation shall be used in conjunction with standard reasonable maximum exposure (RME) assumptions to identify site-specific MO-2 RS. Under MO-2, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-2 limiting RS, then the Permittee may; (1) remediate to the MO-2 limiting RS (and comply with closure/post closure requirements for MO-2), or (2) proceed with a MO-3 evaluation.

VIII.A.3.d. Use of Management Option 3 — The Permittee shall use Management Option 3 (MO-3) which provides the option of using site-specific data for the evaluation of exposure and the evaluation of environmental fate and transport at the AOI. The results of the site-specific evaluation may be to develop site-specific MO-3 RS. Under MO-3, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-3 limiting RS, then the Permittee shall; (1) remediate to the MO-3 RS, (2) conduct

confirmatory sampling, and (3) comply with closure/post closure requirements for MO-3.

VIII.A.4. Corrective Action for Releases Beyond Facility Boundary: Section 3004(v) of RCRA as amended by HSWA, and State regulations promulgated as LAC 33:V.3322.C require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

VIII.A.5. Financial Responsibility: Assurances of financial responsibility for corrective action shall be provided by the Permittee as specified in the Permit following major modification for remedy selection. The Administrative Authority reserves the right to require financial assurance prior to remedy selection based upon facility compliance history, the extent and degree of contamination, financial health of the Permittee, and input from the public.

VIII.A.6. Summary of Corrective Action Activities: A summary of the corrective action activities associated with the facility is provided in Condition VIII, Appendix 1 of this permit. AOCs and SWMUs that are currently being managed or proposed for management under a prescribed corrective action program (e.g., groundwater order, corrective action order, CERCLA) are identified in Condition VIII, Appendix 1, Table 1 of this permit.

VIII.A.7 Approval of Alternate Schedule: The Permittee may submit a written request for an alternate schedule for a submittal deadline as presented in Condition VIII, Table 1. The request should propose a specific alternate schedule and include an explanation as to why the alternate schedule is necessary. The Administrative Authority will consider site-specific criteria in either approving or disapproving the request for an alternate schedule.

### VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING

# VIII.B.1. Notice of Intent

The Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the CAS within sixty (60) days of the effective date of this permit. The notice of intent should state the following in a concise manner:

VIII.B.1.a. General information regarding facility location;

VIII.B.1.b. General information regarding the facility's operational history;

VIII.B.1.c. General discussion on how the Permittee will proceed through the CAS;

VIII.B.1.d. Brief description of proposed performance standards for corrective action; and

VIII.B.1.e. Propose a date for a scoping meeting between the Permittee and the Administrative Authority to be held within sixty (60) days of the date of the Notice of Intent.

# VIII.B.2. Scoping Meeting

The scoping meeting will serve as the first CAS milestone where the Permittee and the Administrative Authority identify expectations concerning CAS implementation. The length and extent of the meeting will depend on the complexity of the site. Agreements on land use, groundwater classification, the level of detail required in the conceptual site model (see Condition VIII.D) and expectations for remediation goals will be discussed during the scoping meeting(s). During the scoping meeting the Permittee will present the following information to the Administrative Authority:

VIII.B.2.a. A conceptual site model (if one already has been developed);

VIII.B.2.b. Discussions on history of corrective action at the facility, including facility investigations, risk evaluations or risk assessments, interim measure/stabilizations and final remedies implemented;

VIII.B.2.c. Proposed performance standards for the facility with justification, and potential risk management approaches;

VIII.B.2.d. Discussions on how the Permittee plans to use the CAS to meet its corrective action obligations, including permitting and compliance issues;

VIII.B.2.c. A Communication Strategy Plan that specifies where in the CAS process the Permittee is currently and how the Permittee will provide information about future progress at the facility to the Administrative Authority (i.e., progress reports, conference calls, routine meetings, etc.);

VIII.B.2.f. Site-specific concerns (i.e., sensitive environments or special subpopulations);

VIII.B.2.g. Need for interim measures or stabilization activities, if necessary; and

VIII.B.2.h. Schedule for submittal of the CAS Investigation Workplan and proposed schedule for conducting and completing CAS requirements, including public participation.

Information plans and reports that have already been developed by the Permittee during the corrective action process can be referenced during the

scoping meeting. The Permittee must coordinate with the Administrative Authority in order to determine the date, time, and location of the scoping meeting.

# VIII.C. REPORTING REQUIREMENTS

VIII.C.1. The Permittee shall submit, in accordance with Condition VII.A.8, signed reports of all activities conducted pursuant to the provisions of this Permit as required by the Administrative Authority. The reporting schedule shall be determined on a case-by-case basis by the Administrative Authority. These reports shall contain, as applicable to the stage of corrective action, the information required by CAS, as well as the following:

VIII.C.1.a. A description of the work completed and an estimate of the percentage of work completed;

VIII.C.1.b. Summaries of all findings, including summaries of laboratory data;

VIII.C.1.c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

VIII.C.1.d. Projected work for the next reporting period;

VIII.C.1.e. Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

VIII.C.1.f. Changes in key project personnel during the reporting period; and

VIII.C.1.g. Summaries of all changes made in implementation during the reporting period.

VIII.C.2. Copies of other reports relating to or having bearing upon the corrective action work (e.g., inspection reports, drilling logs and laboratory data) shall be made available to the Administrative Authority upon request.

VIII.C.3. In addition to the written reports as required in Condition VIII.C.1 and VIII.C.2 above, at the request of the Administrative Authority, the Permittee shall provide status review through briefings with the Administrative Authority.

VIII.C.4. The determination and approval of remedy selections, schedules of submittals and minor changes to any corrective action workplans may be made by the Administrative Authority during the scoping meeting or status review briefings as described in Condition VIII.C.3.

# VIII.D. SPECIFIC CONDITION - CONCEPTUAL SITE MODEL (CSM)

No later than 120 days after the scoping meeting, the Permittee shall submit to the Administrative Authority a CSM (along with the Performance Standards detailed in Condition VIII.A.2) or an update of any CSM submitted at the scoping meeting providing background information and the current conditions at the facility. The level of detail required for the CSM will be discussed during the scoping meeting. At a minimum, the CSM must address current site conditions, land use, known and/or potential constituent source(s), routes of constituent migration, exposure media (i.e., soil, surface waters, groundwater), exposure points, points of compliance and pathways, receptors and source media to be evaluated under the RECAP. The CSM must include a completed Figure 8 (LAC 33:I.Chapter 13). The Permittee may include completed investigations, existing data, or previously submitted documents in the CSM by reference. References must include the names, dates, and brief summaries of the documents.

If a CSM has been previously developed, the scoping meeting will also provide the opportunity for the Permittee and Administrative Authority to consider and identify all data gaps in the CSM. The initial CSM shall be considered the "base document" to be prepared and updated by the facility as new information is gathered during investigations. The CSM shall be used by the facility to make decisions regarding risk management options, ecological risk, and monitored natural attenuation determinations (RECAP Section 2.16), or technical impracticability (TI) waiver determinations, when appropriate.

The Administrative Authority reserves the right to require revisions to the CSM based upon data resulting from ongoing investigations and activities. Revisions to the CSM may also be required for newly identified SWMUs or AOCs according to Condition VIII.L of this permit (See Appendix 1, Ongoing Corrective Action) and based on new information and information not previously considered by the Administrative Authority.

The CSM shall be divided into Profiles as detailed in Conditions VIII.D.1 through 6. If the Permittee chooses to use existing data and documents in the CSM, it may not be necessary to prepare the Profiles as detailed in Conditions VIII.D.1 through 6. However, the existing documents and data must provide sufficient information and detail which corresponds to the information required by the Facility, Land Use and Exposure, Physical, Release, Ecological, and Risk Management Profiles.

# VIII.D.1. Facility Profile

The Permittee shall include in the CSM a Facility Profile which shall summarize the regional location, pertinent boundary features, general facility structures, process areas, and locations of solid waste management units or other potential sources of contaminant migration from the routine and systematic releases of hazardous constituents to the environment (e.g., truck or railcar loading/unloading areas). The Permittee shall also include historical features that may be potential release areas because of past management practices. The Facility Profile shall include:

VIII.D.1.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.1.a(1) General geographic location;

VIII.D.1.a(2) Property lines with the owners of all adjacent property clearly indicated;

VIII.D.1.a(3) Facility structures, process areas and maintenance areas;

VIII.D.1.a(4) Any other potential release areas shall be delineated, such as railcar loading/unloading areas or any other AOI as described in RECAP Section 2.6; and

VIII.D.1.a(5) Locations of historical features that may be potential release areas or any areas of past solid and hazardous waste generation, treatment, storage or disposal activities.

VIII.D.1.b. The Facility Profile shall also include a description of ownership and operation of the facility.

VIII.D.1.c. The Permittee shall provide pertinent information for those spills that have not been assessed and reported to the Administrative Authority during facility investigations, addressed by facility spill contingency plans, or previously remediated or deemed for no further action. The information must include at minimum, approximate dates or periods of past waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, federal, or private party response units), including any inspection reports or technical reports generated as a result of the response.

# VIII.D.2. Land Use and Exposure Profile

The Permittee shall include in the CSM a Land Use and Exposure Profile which includes surrounding land uses (industrial and non-industrial, as described in RECAP Sections 2.9.1 and 2.9.2), resource use locations (water supply wells, surface water intakes, etc.), beneficial resource determinations (groundwater classifications as described in RECAP Section 2.10), natural resources (wetlands, etc.), sensitive subpopulation types and locations (schools, hospitals, nursing homes, day care centers, etc.), applicable exposure scenarios, and applicable exposure pathways identifying the specific sources, releases, migration mechanisms, exposure media, exposure routes and receptors. The Land Use and Exposure Profile shall include:

VIII.D.2.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.2.a(1) Surrounding land uses, resource use locations, and natural resources/wetlands;

VIII.D.2.a(2) Locations of sensitive subpopulations; and

VIII.D.2.a(3) An exposure pathway flowchart which outlines sources, migration pathways, exposure media and potential receptors as depicted in Figure 8 (CMS example) of RECAP.

# VIII.D.3. Physical Profile

The Permittee shall include in the CSM a Physical Profile which shall describe the factors that may affect releases, fate and transport, and receptors, including; topography, surface water features, geology, and hydrogeology. The Physical Profile shall include:

VIII.D.3.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V.Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.3.a(1) Topographic maps with a contour interval of five (5) or ten (10) feet, a scale of one inch to 100 feet (1:100), including hills, gradients, and surface vegetation or pavement;

VIII.D.3.a(2) Surface water features including routes of all drainage ditches, waterways, direction of flow, and how they migrate to other surface water bodies such as canals and lakes;

VIII.D.3.a(3) Regional geology including faulting and recharge areas, as well as local geology depicting surface features such as soil types, outcrops, faulting, and other surface features;

VIII.D.3.a(4) Subsurface geology including stratigraphy, continuity (locations of facies changes, if known), faulting and other characteristics;

VIII.D.3.a(5) Maps with hydrogeologic information identifying water-bearing zones, hydrologic parameters such as transmissivity, and conductivity. Also locations and thicknesses of aquitards or impermeable strata; and

VIII.D.3.a(6) Locations of soil borings and production and groundwater monitoring wells, including well log information, and construction of cross-sections which correlate substrata. Wells shall be clearly labeled with ground and top of casing elevations (can be applied as an attachment).

### VIII.D.4. Release Profile

The Permittee shall include in the CSM a Release Profile which shall describe the known extent of contaminants in the environment, including sources, contaminants of concern (COC), areas of investigations, distribution and magnitude of known COCs with corresponding sampling locations, and results of fate and transport modeling depicting potential future extent/magnitude of COCs. The Release Profile shall include:

VIII.D.4.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V. Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.4.a(1) Estimations of source concentrations, exposure concentrations and compliance concentrations for each affected media as defined in Section 2.8 of RECAP;

VIII.D.4.a(2) Isopleth maps depicting lateral extent and concentrations of COCs;

VIII.D.4.a(3) Results of fate and transport modeling showing potential exposure concentrations and locations; and

VIII.D.4.a(4) Locations of potential sources including past or present waste units or disposal areas and all SWMUs/AOCs.

VIII.D.4.b. Table(s) depicting the following information for each SWMU/AOC, including but not limited to: location; type of unit/disposal/release area; design features; operating practices (past and present); period of operation; age of unit/disposal/release area; general physical condition; and method of closure.

VIII.D.4.c. Table(s) depicting the following waste/contaminant characteristics for those areas referenced in Condition VIII.D.4.b, including but not limited to: type of waste placed in the unit (hazardous classification, quantity, chemical composition), physical and chemical characteristics (physical form, description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents, cohesiveness, vapor pressure); and migration and dispersal characteristics of

the waste (sorption coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

# VIII.D.5. Ecological Profile

The Permittee shall include in the CSM an Ecological Profile that shall describe the physical relationship between the developed and undeveloped portions of the facility, the use and level of disturbance of the undeveloped property, and the type of ecological receptors present in relation to completed exposure pathways. When compiling data for the Ecological Profile, current, as well as, future impacts to receptors and/or their habitats shall be considered. The Ecological Profile shall include:

VIII.D.5.a. A history and description of the developed property on the facility, including structures, process areas, waste management units, and property boundaries;

VIII.D.5.b. A history and description of the undeveloped property, including habitat type (wetland, grassy area, forest, ponds, etc.). Include a description of the primary use, degree and nature of any disturbance, along with proximity to drainage ditches, waterways and landfill areas;

VIII.D.5.c. A description of the site receptors in relation to habitat type, including endangered or protected species, mammals, birds, fish, etc.;

VIII.D.5.d. A description of the relationship between release areas and habitat areas, specifically relating chemicals of potential ecological concern (COEC) to ecological receptors;

VIII.D.5.e. An ecological checklist as described in Section 7.0 of RECAP. An ecological checklist (presented in Appendix C, Form 18 of RECAP) shall be used to determine if a tier 1 (screening level) Ecological Risk Assessment (ERA) is warranted.

# VIII.D.6. Risk Management Profile

The Permittee shall include in the CSM a Risk Management Profile that shall describe how each AOI at the facility will be managed for the protection of human health and the environment. The Risk Management Profile will serve as documentation of the results of the site ranking system (described in Section 2.2 of RECAP). The Risk Management Profile will also document the criteria and verify that the SO, MO-1, MO-2 or MO-3 is appropriate for application at each AOI. The Risk Management Profile shall include:

VIII.D.6.a. A table for tracking the management options for each AOI, and the determination made, whether an AOI is deemed for no further action at

this time (NFA-ATT) or is going to use either the SO, MO-1, MO-2 or MO-3 management option.

VIII.D.6.b. A list of identified site-wide data gaps for further investigation.

VIII.D.6.c. Documentation of all interim measures which have been or are being undertaken at the facility, including under State or Federal compliance orders, other than those specified in the Permit. This documentation shall include the objectives of the interim measures and how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term remedial solution.

# VIII.E. INTERIM MEASURES

VIII.E.1. If at any time during the term of this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU/AOC poses a threat to human health and the environment, the Administrative Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and an Interim Measures Workplan. The Administrative Authority may modify this Permit according to LAC 33:V.321 to incorporate interim measures into the Permit. However, depending upon the nature of the interim measures, a permit modification may not be required.

VIII.E.2. The Permittee may propose interim measures at any time by submittal of an Interim Measures Workplan subject to the approval of the Administrative Authority.

VIII.E.3. The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures and may require the submittal of an Interim Measures Workplan. The following factors will be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

VIII.E.3.a. Time required to develop and implement a final remedy;

VIII.E.3.b. Actual and potential exposure to human and environmental receptors;

VIII.E.3.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

VIII.E.3.d. The potential for further degradation of the medium in the absence of interim measures;

VIII.E.3.e. Presence of hazardous wastes in containers that may pose a threat of release;

VIII.E.3.f. Presence and concentration of hazardous waste including hazardous constituents in soil that has the potential to migrate to ground water or surface water;

VIII.E.3.g. Weather conditions that may affect the current levels of contamination;

VIII.E.3.h. Risks of fire, explosion, or accident; and

VIII.E.3.i. Other situations that may pose threats to human health and the environment.

VIII.E.5. Upon approval of the Interim Measures Workplan and completion of the interim measure(s) implementation, the Permittee will submit a report to the Administrative Authority describing the completed work.

VIII.E.6. At anytime during or after the interim measure(s), including the issuance of an NFA-ATT, the Administrative Authority may require the Permittee to submit the SWMUs/AOCs for further corrective action.

# VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN

VIII.F.1. The CAS Investigation Workplan that describes site investigation activities for corrective action shall be submitted to the Administrative Authority within 180 days after the scoping meeting between the Permittee and the Administrative Authority. The CAS Investigation Workplan must address releases of hazardous waste or hazardous constituents to all media, unless otherwise indicated, for those SWMUs/AOCs listed in Appendix 1, Table 1. The focus of the site investigation phase for corrective action is to collect data to fill in data gaps identified in the CSM. The corrective action investigations may be conducted in phases if warranted by site conditions, contingent upon approval by the Administrative Authority.

VIII.F.1.a. The CAS Investigation Workplan shall describe the management options (MO) for each AOI/release area, data quality objectives for achieving each management option, and proposals for release characterizations (sampling and analysis/quality assurance plans) to support the data quality objectives (DQOs). (DQOs are determined based on the end use of the data to be collected, and the DQO development process should be integrated into project planning and refined throughout the CAS implementation. DQOs shall be used to 1) ensure that environmental data are scientifically valid, defensible, and of an appropriate level of quality given the intended use, and 2) expedite site investigations. The CAS Investigation Workplan is required to have DQOs that are developed to support the performance standard for each

release.) The CAS Investigation Workplan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the site investigations. The scope of work for the site investigation can be found in RECAP Appendix B.

VIII.F.1.b. The CAS Investigation Workplan shall describe sampling, data collection quality assurance, data management procedures (including formats for documenting and tracking data and other results of investigations) and health and safety procedures.

VIII.F.1.c. Development of the CAS Investigation Workplan and reporting of data shall be consistent with the latest version of the following EPA and State guidance documents or the equivalent thereof:

VIII.F.1.c(1) Guidance for the Data Quality Assessment, Practical Methods for Data Analysis. QA97 Version EPA QA/G-9. January 1998;

VIII.F.1.c(2) Guidance for the Data Quality Objectives Process. EPA QA/G-4. September 1994;

VIII.F.1.c(3) Data Quality Objectives Remedial Response Activities. EPA/540/G87-003. March 1987;

VIII.F.1.c(4) Guidance on Quality Assurance Project Plans. EPA QA/G-5. February 1998;

VIII.F.1.c(5) Interim EPA Data Requirements for Quality Assurance Project Plans. EPA Region 6, Office of Quality Assurance. May 1994;

VIII.F.1.c(6) 29 CFR 1910.120 (b) for the elements to Health and Safety plans;

VIII.F.1.c(7) RCRA Groundwater Monitoring: Draft Technical Guidance EPA/530-R-93-001 November 1992;

VIII.F.1.c(8) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, 3<sup>rd</sup> Edition. November 1992, with revisions;

VIII.F.1.c(9) The LDEQ Handbook - Construction of Geotechnical Boreholes and Groundwater Monitoring Systems," prepared by the LDEQ and the Louisiana Department of Transportation and Development. This document is printed by and available from the Louisiana Department of Transportation and Development, Water

Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245; and

VIII.F.1.c(10) The LAC 33:I.Chapter 13 and Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP).

VIII.F.2. After the Permittee submits the CAS Investigation Workplan; the Administrative Authority will approve, disapprove, or otherwise modify the CAS Investigation Workplan in writing. All approved workplans become enforceable components of this Permit.

In event of disapproval (in whole or in part) of the workplan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the CAS Investigation Workplan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified workplan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the ground for the exception within fourteen (14) days of receipt of the disapproval.

VIII.F.3. The Administrative Authority shall review for approval, as part of the CAS Investigation Workplan or as a new workplan, any plans developed pursuant to Condition VIII.L addressing further investigations of newly-identified SWMUs/AOCs, or Condition VIII.M addressing new releases from previously-identified SWMUs/AOCs.

# VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS

No later than fourteen (14) days after the Permittee has received written approval from the Administrative Authority for the CAS Investigation Workplan, the Permittee shall implement the site investigation activities according to the schedules and in accordance with the approved CAS Investigation Workplan and the following:

VIII.G.1. The Permittee shall notify the Administrative Authority at least 10 working days prior to any field sampling, field-testing, or field monitoring activity required by this Permit to give LDEQ personnel the opportunity to observe investigation procedures and/or split samples.

VIII.G.2. Deviations from the approved CAS Investigation Workplan, which are necessary during implementation, must be approved by the Administrative Authority and fully documented and described in the progress reports (Condition VIII.C), RECAP Report (Condition VIII.H) and the final Risk Management Plan (Condition VIII.J).

# VIII.H. RECAP REPORT

Within ninety (90) days after completion of the site investigation the Permittee shall submit a RECAP Report to the Administrative Authority for approval. The RECAP Report shall document the results of the site investigation activities, and the evaluation of the impacts from releases. The Administrative Authority will review and evaluate the report and provide the Permittee with written notification of the report's approval or a notice of deficiency. If the Administrative Authority determines the RECAP Report does not fully meet the objectives stated in the CAS Investigation Workplan (Permit Condition VIII.F), the Administrative Authority shall notify the Permittee in writing of the report's deficiencies, and specify a due date for submittal of a revised Final Report to the Administrative Authority.

VIII.H.1. The Permittee shall screen site-specific data using the appropriate RECAP standard (RS) for each AOI (depending on the MO), evaluate impacts from releases with exposure scenario evaluations, and update the Risk Management Profile of the CSM.

VIII.H.2. The report shall include, but not be limited to, the following:

VIII.H.2.a. Documentation of site investigation activities and results;

VIII.H.2.b. Evaluation of exposure scenarios to document impacts from releases;

VIII.H.2.c. Deviations from the CAS Investigation Workplan;

VIII.H.2.d. Results of screening activities using RECAP standards (RS), including SO, MO-1, MO-2, or MO-3 RS for each media;

VIII.H.2.e. The revised CSM with updated profiles which incorporate investigation and screening results; and

VIII.H.2.f. Proposed revisions to performance standards based on new information (e.g., change in land use, difference in expected receptors and/or exposure, or other differences in site conditions), if warranted.

# VIII.I. REMEDIAL ALTERNATIVES STUDY

Upon completion and approval of the RECAP Report, the Permittee shall proceed with the evaluation of remedial alternatives to complete corrective action for each AOI according to the performance standards described in Condition VIII.A.2. The remedial alternatives shall be submitted to the Administrative Authority in the Remedial Alternatives Study (RAS) within ninety (90) days of the Administrative Authority's approval of the RECAP Report. In the Remedial Alternatives Study, the Permittee shall identify and evaluate various potential remedies that would meet the performance-based corrective action objectives and propose one or more specific remedies based on an evaluation of applicable data and available

corrective action technologies. The RAS shall be prepared in a manner that addresses the extent and nature of the contamination at the facility.

### VIII.I.1. The Permittee shall evaluate remedies for each AOI that shall:

VIII.I.1.a. attain compliance with corrective action objectives for releases of hazardous waste and/or hazardous constituents, as established in the Conceptual Site Model or in later investigations approved by the Administrative Authority;

VIII.I.1.b. control sources of releases;

VIII.I.1.c. meet acceptable waste management requirements;

VIII.I.1.d. protect human health and the environment; and

VIII.1.1.e. meet applicable statutory and regulatory requirements (as noted in Condition VIII.A.2.b).

VIII.I.2. The Permittee shall evaluate the use of presumptive remedies and innovative technologies to achieve the appropriate remedial performance standards for each AOI.

VIII.I.3. The Permittee shall review the current interim measures/ stabilization activities to evaluate if these measures meet all the criteria for final remedy.

VIII.I.4. If under certain site-specific conditions, or when it is not technically or economically feasible to attain the corrective action objectives, the Permittee may propose to use institutional controls to supplement treatment or containment-based remedial actions upon approval of the Administrative Authority (Section 2.15 of RECAP).

### VIII.1.5. The RAS shall at a minimum include:

VIII.I.5.a. An evaluation of the performance reliability, ease of implementation, and the potential impacts of the potential remedies;

VIII.I.5.b. An assessment of the effectiveness of potential remedies in achieving adequate control of sources and meeting remedial performance standards;

VIII.I.5.d. An assessment of the costs of implementation for potential remedies;

VIII.I.5.e. An assessment of the time required to begin and complete the remedy;

VIII.I.5.f. An explanation of the rationale for the remedy proposed for each AOI or group of AOIs; and

VIII.1.5.g. An assessment of institutional requirements (e.g., state permit requirements that may impact remedy implementation).

VIII.1.6. The Administrative Authority will review and evaluate the RAS and provide the Permittee with written notification of the study's approval or a notice of deficiency. If the Administrative Authority determines the RAS does not fully meet the requirements detailed in Conditions VIII.1.1 through VIII.1.5, the Administrative Authority shall notify the Permittee in writing of the RAS's deficiencies, and specify a due date for submittal of a revised RAS to the Administrative Authority. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

# VIII.J. RISK MANAGEMENT PLAN

Within ninety (90) days of the Administrative Authority's approval of the RAS, the remedy/remedies proposed for selection shall be documented and submitted in the Risk Management Plan. The Permittee shall propose corrective action remedies in accordance with Chapter IV of the RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A or as directed by the Administrative Authority.

VIII.J.1. The Risk Management Plan shall at a minimum include:

VIII.J.1.a. A summary of the remedial alternatives for each AOI and the rationale used for remedy selection;

VIII.J.1.b. The final CSM with proposed remedies, including locations of AOIs addressed by a risk management activity, COC concentrations that represent the long-term fate and transport of residual COCs and the exposure pathways affected by the risk management activity;

VIII.J.1.c. Cost estimates and implementation schedules for proposed final remedies;

VIII.J.1.d. Proposed remedy design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, property access, easements and right-of-way requirements, special health and safety requirements, and community relations activities:

VIII.J.1.e. Remedy performance criteria and monitoring:

The Permittee shall identify specific criteria (such as land use changes, fate and transport model verification and constructed remedy performance) that will be evaluated to demonstrate that the risk management activity implemented will remain protective. A schedule for periodic performance review (such as monitoring data summaries, including graphical and statistical analyses) shall be established to demonstrate that the implemented activities are consistently achieving and maintaining desired results. Further, a mechanism shall be established to re-evaluate risk management activities in the event the implemented action does not achieve and maintain the performance standards;

VIII.J.1.f. Contingency plans; and

VIII.J.1.g. Description and schedules for performance reviews.

VIII.J.2. After the Permittee submits the Risk Management Plan, the Administrative Authority will review and evaluate the plan and subsequently either inform the Permittee in writing that the plan is acceptable for public review or issue a notice of deficiency.

VIII.J.3. If the Administrative Authority determines the Risk Management Plan does not fully meet the remedial objectives, the Administrative Authority shall notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised Final Risk Management Plan. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J.4. After the Administrative Authority has determined the Risk Management Plan is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the plan as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.J.5. After conclusion of a 60-day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the 60-day comment period.

VIII.J.6. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.3 of this permit.

VIII.J.7. If, after considering all public comments, the Administrative Authority determines that the Risk Management Plan is adequate and complete, the Administrative Authority will issue a public notice for final approval the Class 3 permit modification. The resultant modified permit will include schedules for remedy implementation as well as financial assurance provisions as required by Condition VIII.A.5 of this permit.

# VIII.K. DETERMINATION OF NO FURTHER ACTION

# VIII.K.1. NFA-ATT DETERMINATIONS FOR SPECIFIC SWMUs/AOCs

VIII.K.1.a. Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1<sup>1</sup> permit modification (<sup>1</sup> requiring Administrative Authority approval) request under LAC 33:V.321.C.1. The NFA-ATT request must contain information demonstrating that there are no releases of hazardous constituents from a particular SWMU/AOC that pose a threat to human health and/or the environment.

The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used.

VIII.K.1.b. If, based upon review of the Permittee's request for a permit modification, the results of the site investigations, and other information the Administrative Authority determines that releases or suspected releases from an individual SWMU/AOC which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

VIII.K.1.c. In accordance with LAC 33:V.321.C.1.a.ii, the Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1<sup>1</sup> permit modification (<sup>1</sup> requiring Administrative Authority approval) request.

### VIII.K.2. FACILITY-WIDE NFA-ATT DETERMINATION

VIII.K.2.a. Upon the completion of all activities specified in the Risk Management Plan and after all SWMUs and AOCs at the facility have been remediated according to the standards dictated by the selected RECAP MO, the Permittee shall submit a summary report supporting a determination of NFA-ATT on a facility-wide basis.

VIII.K.2.b. The summary report must include a historical narrative for each SWMU/AOC at the site that includes a summary of the investigation, sampling & analysis, remedial, and confirmatory sampling activities leading to the NFA-ATT request. The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used. The facility-wide NFA-ATT determination must consider any newly-identified SWMUs/AOCs discovered after submittal of the Risk Management Plan.

VIII.K.2.c. The Administrative Authority will review and evaluate the summary report and subsequently either inform the Permittee in writing that the report is acceptable for public review or issue a notice of deficiency.

VIII.K.2.d. If the Administrative Authority determines the summary report does not fully demonstrate that all remedial objectives have been satisfied, the Administrative Authority shall notify the Permittee in writing of the summary report's deficiencies and specify a due date for submittal of a revised summary report.

VIII.K.2.e. After the Administrative Authority has determined the facility-wide NFA-ATT summary report is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the summary report as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.K.2.f. After conclusion of a sixty (60)-day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60)-day comment period.

VIII.K.2.g. If, based upon review of the Permittee's Class 3 permit modification request, the results of the site investigations, confirmatory sampling, and other pertinent information, the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will grant the modification request.

VIII.K.2.h. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.4 of this permit.

VIII.K.2.i. If, after considering all public comments, the Administrative Authority determines that all activities specified in the Risk Management Plan have been completed and that all SWMUs and AOCs have been remediated to the selected MO, the Class 3 permit modification for facility-wide NFA-ATT will receive final approval. The CAS permit conditions will remain a part of the modified permit in the event that the remedial actions taken fail to maintain the established performance standard and to address any SWMUs/AOCs discovered at a later date.

### VIII.K.3. CONTINUED MONITORING

If necessary to protect human health and/or the environment, a determination of NFA-ATT shall not preclude the Administrative Authority from requiring continued monitoring of air, soil, groundwater, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

### VIII.K.4. ADDITIONAL INVESTIGATIONS

A determination of NFA-ATT shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU/AOC at the facility that is likely to pose a threat to human health and/or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to LAC 33:V.321.

# VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUS AND POTENTIAL AOCS

VIII.L.1. The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMUs and potential AOCs (i.e., a unit or area not specifically identified during previous corrective action assessments, RFA, etc.), discovered in the course of ground water monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later than thirty (30) days after construction. The notification shall include the following items, to the extent available:

VIII.L.1.a. The location of the newly-identified SWMU or potential AOC on the topographic map required under LAC 33:V.517.B. Indicate all existing units (in relation to other SWMUs/AOCs);

VIII.L.1.b. The type and function of the unit;

VIII.L.1.c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

VIII.L.1.d. The period during which the unit was operated;

VIII.L.1.e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

VIII.L.1.f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU/AOC.

VIII.L.2. Based on the information provided in the notification, the Administrative Authority will determine whether or not the area is a newly-identified SWMU or AOC. If the area is determined to be a newly-identified SWMU or AOC, the Administrative Authority will inform the Permittee in writing and request that the Permittee submit a Class 1<sup>1</sup> permit modification request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 1 of this permit.

Further, the Administrative Authority will determine the need for further investigations or corrective measures at any newly identified SWMU or AOC. If the Administrative Authority determines that such investigations are needed, the Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU or AOC will be reviewed for approval as part of the current CAS Investigation Workplan or a new CAS Investigation Workplan. The results of the investigation of any newly-discovered SWMU/AOC shall be incorporated into the CSM.

## VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC

The Permittee shall notify the Administrative Authority of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of ground water monitoring, field investigation, environmental auditing, or other means. The notification must be in accordance with the procedures specified in Conditions II.E.16 through II.E.20 of this permit and based upon the nature, extent, and severity of the release. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the CSM, completed RECAP Report, or investigation of an AOC, the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification.

The Administrative Authority may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the CAS Investigation Workplan or a new CAS Investigation Workplan. The Permit will be modified to incorporate the investigation, according to the Class 1<sup>1</sup> permit modification procedures under LAC 33:V.321. The results of the investigation of any newly-identified release(s) shall be incorporated into the CSM.

### VIII.N. PUBLIC PARTICIPATION REQUIREMENTS

Public participation is an essential element in the implementation of any corrective action program at the facility. The CAS promotes the early and continued involvement of stakeholders in site remediation activity during permit issuance, renewal, or modification. The public is invited to review and comment on the corrective action requirements contained in any draft permitting decisions or draft permit modification documents and the associated plans and reports submitted by the Permittee. The Administrative Authority reserves the right to require more extensive public participation requirements based upon site-specific conditions and other relevant factors (e.g., compliance history, potential offsite impact, community interest, etc.). At a minimum, the public participation requirements shall include the following.

### VIII.N.1. NFA-ATT Determinations for Specific SWMUs/AOCs

Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1<sup>1</sup> permit modification request under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1<sup>1</sup> permit modification request, in accordance with LAC 33:V.321.C.1.a.ii and Condition VIII.K.1.c of this permit.

### VIII.N.2. Draft Permitting Decision

The public may review and comment on the terms and conditions of the CAS during the public notice and comment period of the draft permitting decision. The Administrative Authority shall issue public notice upon preparation of the draft permitting decision in accordance with LAC 33:V.715. During the forty-five (45) day public comment period, the Administrative Authority will accept public comments on the draft permitting decision. At the end of the public comment period, the Administrative Authority will consider and address all public comments and make any necessary revisions to the draft permitting decision. After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permitting decision. The final permitting decision will include a "Responsiveness Summary" detailing all comments received on the draft permitting decision and the actions taken (if necessary) to correct the draft before issuance of the final permitting decision.

### VIII.N.3. Final Remedy Selection

The public may review and comment on the terms and conditions of the Risk Management Plan as described in Conditions VIII.J.4 through VIII.J.7 of this permit. If after addressing all public comments the Administrative Authority determines that the Risk Management Plan is satisfactory, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will identify the proposed remedy for corrective action at the site and the reasons for its selection, describe all other remedies that were considered, and solicit for public review and comments on the Risk Management Plan included in the draft permit modification document.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

### VIII.N.4. Facility-Wide NFA-ATT

Upon the completion of all activities specified in the Risk Management Plan and after all facility remedial objectives have been met, the Permittee may submit a summary report for a determination of NFA-ATT on a facility-wide basis in accordance with Condition VIII.K.2 of this permit. The public may review and comment on the summary report as described in Condition VIII.K.2.b. If after addressing all public comments the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will provide a summary detailing contamination sources, site investigations, the MO selected for the facility, facility remedial standards, remedial actions, and sampling results demonstrating that the facility remedial standards have been achieved.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

# Table 1: Corrective Action Strategy Notification and Reporting Requirements

Below is a summary of the major notifications and reports that may be required by the Administrative Authority under the Corrective Action Strategy of this Permit in the event of releases requiring RCRA corrective action. The Administrative Authority will notify the Permittee of the notification and reporting requirements during the scoping meeting or another applicable stage of the corrective action process.

### **Actions**

### **Due Date**

Submit Notice of Intent to request use of the CAS to the Administrative Authority for review and comment (Condition VIII.B.1)	Within sixty (60) days of the effective date of this permit (if facility corrective action is required)
CAS Scoping Meeting held between facility and Administrative Authority (Condition VIII.B.2)	Within sixty (60) days of submittal of the Notice of Intent
Submit Progress Reports on all activities to the Administrative Authority (Condition VIII.C.1)	Schedule to be determined by the Administrative Authority on a case-by-case basis
Make available other reports relating to corrective action to the Administrative Authority (Condition VIII.C.2)	Upon request of the Administrative Authority
Provide briefings to the Administrative Authority (Condition VIII.C.3)	As necessary and upon request by the Administrative Authority
Submit Conceptual Site Model (CSM) (Condition VIII.D) and facility Performance Standards (Condition VIII.A.2) to the Administrative Authority	Within one-hundred and twenty (120) days after the scoping meeting
Perform Interim Measures (Condition VIII.E)	As determined by the Administrative Authority on a case by case basis
Submit Corrective Action Strategy (CAS) Workplan for the facility investigation to the Administrative Authority (Condition VIII.F)	Within one-hundred and eighty (180) days after the CAS Scoping Meeting

Implement site investigation activities under CAS Investigation Workplan according to approved schedule (Condition VIII.G)	Within fourteen (14) days of receipt of approval by the Administrative Authority
Submit RECAP Report to the Administrative Authority (Condition VIII.H)	Within ninety (90) days of completion of the site investigation
Submittal of Remedial Alternatives Study (RAS) to the Administrative Authority (Condition VIII.I)	Within ninety (90) days of completion of approval of the RECAP Report by the Administrative Authority
Submit Risk Management Plan to the Administrative Authority (Condition VIII.J)	Within sixty (90) days of approval of the RAS by the Administrative Authority
Submit NFA (and Permit Modification) request to the Administrative Authority (Condition VIII.K)	As necessary
Notification of newly-identified SWMUs and potential AOCs (Condition VIII.L)	Thirty (30) days after discovery
Notification of newly-discovered releases (Condition VIII.M)	Fifteen (15) days after discovery

### APPENDIX 1

### SUMMARY OF CORRECTIVE ACTION ACTIVITIES

The intent of Appendix 1 is to provide an overview of the history and current status of the corrective action process at the site at the time of issuance of the final permit and may not necessarily provide a definitive regulatory determination for a particular SWMU of AOC. The classification of an individual SWMU or AOC is subject to change by the Administrative Authority based on future geological/hydrogeological condition and future available information available to the Administrative Authority.<sup>1</sup>

The Sulfur Recovery Unit (SRU), includes three SWMUS, SWMUS 5 (Flexzone Tar Truck Unloading Area), 11c (Flexzone Sump), and 16 (Toluene Tar Tank or Felxzone Tank). The original Flexzone sump and tank have been replaced and a secondary containment has been installed around the entire area. The areas are described below:

**SWMU** 5: The Flexzone Tar Truck Unloading Area is approximately 10 ft east of the Toluene Tar Tank in the northwest corner of the facility. The area is used to offload toluene tar, which is transferred by truck from the process unit. The Flexzone Tar Tank Unloading Area has been in operation since 1975.

**SWMU 11e:** The Flexzone Sump is located between the Toluene Tar Tank Unloading Area and the Toluene Tar Tank. It was designed to collect excess tar from the Toluene Tar Tank. The sump was constructed below grade with concrete and was replaced in kind in 1988.

SWMU 16: The Toluene Tar Tank is a carbon steel tank used to store the Flexzone toluene tars prior to disposal off-site. The tank was constructed in 1974 and was replaced in kind in the late 1980's with Tank RV-10. Tank RV-10 has a capacity of 13,000 gallons, is constructed aboveground, and horizontally oriented. The dimensions of the tank are approximately 9 feet in diameter and 27 feet in length. The tank is heated and maintained under a nitrogen blanket with back-pressure control system at 25 lbs psi.

**SWMU 10**: The Monochem Landfill is located in Section 11-T10A-R2E, southwest of the facility and within 300 ft of the Mississippi River levee. The Monochem Landfill occupies approximately 9 acres and has a shallow groundwater monitoring network around its perimeter.

SWMU 11a: The Celogen OT Sump is an open top, below grade structure constructed of concrete and covered with a metal grate. The Celogen OT Sump is a part of the Celogen OT Unit process wastewater collection system. The process wastewaters generated by the unit are aqueous and contain dissolved 1,2-dichloroethene (EDC). In the early 1990's, the initial RFI of SWMU 11a was conducted. The findings from the initial RFI prompted a supplemental assessment to delineate groundwater beneath the SWMU. A supplemental assessment was conducted in 1999. The investigations revealed that EDC concentrations were present in shallow soil and groundwater within a localized area beneath the Celogen OT

Unit. Interim corrective actions conducted for the Celogen OT Sump SWMU involved a dual phase extraction pilot study on monitoring wells OT-1 and OT-6 (groundwater samples extracted from these wells contained the highest dissolved EDC concentrations) to determine the effectiveness of simultaneously mitigating the unsaturated zone and the shallow water bearing zone (Zone III). This extraction procedure was conducted once a month from September 2006 until March 2007 for approximately 8 hours each event. Analyses of groundwater samples collected from six monitoring wells installed in the Celogen OT Unit (wells OT-1 through OT-6) indicated a reduction in the dissolved EDC concentrations in four of the six wells (perimeter wells OT-2 through OT-5). EDC concentrations fluctuated throughout the duration of the pilot study, implying that dissolved EDC from areas surrounding the wells was being recovered by the wells. A dual phase extraction program will continue at the Celogen OT Unit in an attempt to further mitigate EDC concentrations in soil and groundwater.

SWMU 11b: The BHT/B9 Sump is a concrete sump which is partially below grade, with lateral dimensions of approximately 18 ft by 11 ft; a narrow metal grate is the only opening of the surface. The sump is part of the process wastewater collection system for the BHT process unit.

**SWMU 11c:** The Flexzone Pond is inactive (closed in 2003). The Flexzone pond was a below-grade concrete sump approximately 9 ft deep, with lateral dimensions of 40 ft by 50 ft. In the spring of 2003, the pond was cleaned by removing approximately 587,558 pounds of material. The empty structure was partially filled with a fluid material (a concrete mixture).

During a subsurface assessment in close proximity to the closed former Flexzone Pond in 2004, a localized light non-aqueous phase liquid (LNAPL) was discovered on the exterior of the former Flexzone Pond near the southwest corner at a depth of approximately 7 ft below ground surface (bgs). Monitoring wells were installed during the January 2007 RFI to help define the extent of the COCs in the groundwater in the vicinity of the LNAPL.

SWMU 11d: The UDMH Sump is a below grade concrete sump with lateral dimensions of approximately 10 ft by 10 ft. The sump is used to temporarily store process water from the BHT production unit.

SWMU 11f: The Neutralization Sump is a below-grade concrete sump, located toward the center of the Geismar Facility near the Flexzone Unit. The sump is part of the process wastewater collection system and is used to neutralize process water through the addition of either acid or caustic, as needed.

**SWMU 11g:** The Thiazole Sump collects process wastewater from the Thiazole Unit. The sump is constructed and is set below grade, although the upper portions of the sump are above grade.

SWMU FP: The Fire Pond Drum Area was situated on the southern and western exterior of the Fire Pond. It contained buried drums and debris that were removed. Corrective actions were completed in January 2007 though the removal and off-site disposal of approximately

5,500 cubic yards of material. Analyses of samples collected from the bottom and sides of the excavated area indicated that the corrective action effectively mitigated this SWMU.

**SWMU EDC:** The EDC Storage Vessel is a 12,000 gallon storage vessel that was put into service at the Geismar facility in 1981. The EDC Storage Vessel is constructed of steel, is cylindrical in shape, horizontally oriented above the ground on concrete "saddles" and is constructed within a concrete secondary containment system. The vessel is located in the western portion of the Geismar Facility.

A limited investigation of EDC Storage Vessel was conducted in the late 1990's after an accidental overflow of rinse water from the vessel. The limited assessment indicated detectable concentration of EDC in shallow soil and borehole water samples collected from beneath the secondary containment area for the vessel.

AOC-A: Rail Spot 18 - The Geismar Facility's surface water runoff control system is designed to separate process area stormwater runoff from the general area (non-contact) stormwater runoff. AOC-A is a stormwater ditch. The ditch segment of interest is approximately 100 ft long and 20 ft wide. This ditch receives runoff from the Rail Spot Unloading Area, the vacant area north of the Rail Spot and the occasional overflow runoff from the Flexzone Tank Farm area during periods of heavy rain.

AOC-D: Process Area Stormwater Drainage System (Chemical Process Area) - The stormwater drainage system within the chemical process areas of the Geismar Facility is designed to transport contact stromwater from the process area.

The United States Environmental Protection Agency conducted a preliminary review and inspection and issued a RFA in August 1987 that identified 26 SWMUs and 7 AOCs. Lion conducted a waste analyses and release investigation on 17 SWMUs and 3 AOCs in late 1990 and early 1991 to address the items that were listed in the RFA. The goal of the preliminary investigation was to determine the medias effected, to characterize the waste and constituents in question, and to identify the releases to the environment. The findings were reported to EPA in report dated April 17, 1991. A RFI work plan was submitted to EPA on July 18, 1991. EPA approved the RFI work plan and the preliminary report on September 25, 1991. Phase I of the RFI was conducted to determine whether a SWMU or AOC released hazardous waste constituents into the environment; and if they have released, what COCs were released. The RFI Phase I investigation took place between January and June 1992. Lion submitted to LDEQ the RFI Phase I report on December 3, 1992 and approved the Phase I interim report on March 30, 1998. After the Phase I report the number of SWMUs was reduced to 12 and the number of AOCs was reduced to 2. Two additional SWMUs were discovered following the completion of the Phase I RFI report, the Fire Pond Drum Area and EDC Storage Vessel, which were included in the Phase II RFI investigation. The Phase II RFI was conducted to further delineate the extent of the contamination. The Phase II RFI work plan was submitted to LDEQ in February 2001 and was approved November 2, 2006. Phase II RFI work was conducted between December 2006 and January 2007.

Lion is currently awaiting approval of the RFI Phase II report by LDEQ. The Phase II RFI work plan identified 12 SWMUs and two AOCs for investigation at the site that potentially

contained soil and/or groundwater constituents that exceeded the RECAP Screening Option Screening Standard (SO SS).

SWMU SWB - Sulfur Washout Basin- The SWB received washout from pumps that contained sulfur and residual carbon disulfide.

SWMU HBT- High-Boiling Tar Drumming Area- the HBT is located in the Thiazoles Unit of the Geismar Facility and collected stormwater runoff and washdowns from an area that was used to drum high-boiling tar wastes.

SWMUs SWB and HBT were discovered in November, 2007; the two SWMUs were excavated and the surrounding soil was removed. Surface investigation for SWMUs SWB and HBT took place in January 2008 and was consistent with the 2003 RECAP and the Work Plan approved by LDEQ in November 2006.

Tank PV-42- As a part of the closure plan, a subsurface investigation was performed at Tank PR-42. Both the soil and groundwater samples indicate contamination. Soil contaminates include: 2(3H)- Benzothiazolone, 2(3H)-benzothiazolethionene, Benzenethiol, N-nitrosodiphenylamine, and elevated levels of iron. Groundwater contaminants include: 2(3H)-Benzothiazolethionene, 2(3H)-Benzothiazolethione, 4-Bromophenyl phenyl ether, Benzenethiol, Benzo(a)pyrene, benzothiazole, bis(2-ethlhexyl)phthalate, Hexachlorobenzene, Hexachlorobutadiene, methylbenzothiazole, N-nitrosodimethylamine, Pentachloropheno, difluorobenzene and elevated levels of arsenic, barium, cadmium, iron, lead, nickel, and vanadium.

Tank PR-202. Both soil and groundwater samples indicate contamination. Soil contaminates include: Benzenethiol, N-nitrosodiphenylamine, tert-butyl-4-methylphenol (t-BPC) and high levels of iron. Groundwater contaminants include: 2(3H)-Benzothiazolethione, tert-butyl-4-methylphenol (t-BCP), and elevated levels of arsenic, barium, beryllium, cadmium, chromium, iron, lead, nickel, vanadium, and zinc.

Further investigation of the subsurface is required to determine the lateral and vertical extent of contamination.

Former Incinerator- As a part of the closure plan, a subsurface investigation was performed at the former incinerator. Both soil and groundwater samples indicated contamination. Soil contaminants were found in shallow soils, down to 15 feet (total depth of sampling) and include: 2(3H) - Benzothiazolethione, Benzenethiol, N-nitrosodiphenylamine, and high levels of iron. Groundwater contaminants include 2(3H)-Benzothiazolone, 2(3H)-Benzothiazolethione, Benzothiazole, Methyl benzothiazole, N-nitrosodiphenylamine, and elevated levels of arsenic, iron, lead, nickel, and vanadium.

Tank PV-525- As part of their closure plan, a subsurface investigation was performed at Tank PV-525. Groundwater from boring 3 indicated the presence of n-hexane, 2-methylnaphthalene, 4-nitoraniline and dibenz(a,h)athracene above screening standards.

Additional groundwater samples outside boring 3 are required to define the area of contamination.

**Drum Storage Pad-** As a part of the closure plan, a subsurface investigation was preformed at the Drum Storage Pad. No closure certification has been submitted to LDEQ; however conversations with the facility indicated similar contamination to the Tanks and Former Incinerator areas listed above.

<sup>1</sup> All of the information regarding SWMU 5, SWMU 11e, SWMU 16, SWMU 10, SWMU 11a, SWMU 11b, SWMUU 11c, SWMU 11d, SWMU 11f, SWMU 11g, SWMU FP, SWMU EDC, AOC A, and AOC D was taken from the September 6, 2007 RFI/RECAP report. The information regarding SWMU SWB and SWMU HBT was taken from March 13, 2008 RFI/RECAP Addendum.

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40C or SWMII	40C/SWMI Description	OCKWAII Description   Status of CA Activity   Corrective   FD.	Corrective	FDMS
Namehow/Area Mane		francisco for comment	detion	Document ID #/
Nambel/Area Mane			warner	Journal Date
			1 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Approvat Date
SWMU 5: Flexzone Tar	Soil/ Groundwater	RECAP/ Phase II RFI	TBD,	Part 1 36259515;
Truck Unloading Area		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU 11e: Flexzone	Soil/ Groundwater	RECAP/ Phase II RFI	TBD	Part 1 36259515;
Sump		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU 16: Toluene Tar	Soil/ Groundwater	RECAP/ Phase II RFI	TBD	Part 1 36259515;
Tank (Flexzone Tank;		Report submitted		Part 2 36259615
Tank RV-10)		September 6, 2007		
SWMU 10: Monochem	Soil/ Groundwater	RECAP/ Phase II RFI	TBD1	Part 1 36259515;
Landfill		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU 11a: Celogen OT	Soil/ Groundwater	RECAP/ Phase II RFI	TBD1	Part 1 36259515;
Sump		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU 11b: BHT/B9	Soil/ Groundwater	RECAP/ Phase II RFI	$TBD^1$	Part 1 36259515;
Sump		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU 11c: Flexzone	Soil/ Groundwater	RECAP/ Phase II RFI	TBD1	Part 1 36259515;
Pond		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU 11d: UDMH	Soil/ Groundwater	RECAP/ Phase II RFI	${ m TBD}^{ m I}$	Part 1 36259515;
Sump		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU 11f:	Soil/ Groundwater	RECAP/ Phase II RFI	$  TBD^{I}$	Part 1 36259515;
Neutralization Sump		Report submitted		Part 2 36259615
		September 6, 2007		

AOC or SWMU	AOC/SWMU Description	Status of CA Activity	Corrective	EDMS
Number/Area Name		•	Action	Document ID #/
				Approval Date
SWMU 11g: Thiazole	Soil/ Groundwater	RECAP/ Phase II RFI	TBD	Part 1 36259515;
Sump		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU FP: Fire Pond	Soil/ Groundwater	RECAP/ Phase II RFI	$TBD^{1}$	Part 1 36259515;
Drum Area		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU EDC: EDC	Soil/ Groundwater	RECAP/ Phase II RFI	TBD	Part 1 36259515;
Storage Vessel		Report submitted		Part 2 36259615
		September 6, 2007		
SWMU SWB: Sulfur	Soil/Groundwater	Addendum to August 2007	TBD	36769178
Washout Basin		RCRA RECAP/Phase II		
		RFI submitted March 13,		
		2008		;
SWMU HBT: High-	Soil/Groundwater	Addendum to August 2007	TBD <sup>1</sup>	36769178
Boiling Tar Drumming		RCRA RECAP/Phase II		
Area Sump		RFI submitted March 13,		
		2008		
AOC A: Rail Spot 18	Soil/ Groundwater	RECAP/ Phase II RF1	TBD	Part 1 36259515;
	*1,	Report submitted		Part 2 36259615
		September 6, 2007		
AOC D: Process Area	Soil/ Groundwater	RECAP/ Phase II RFI	$  TBD^1  $	Part 1 36259515;
Storm Water Drainage		Report submitted		Part 2 36259615
System		September 6, 2007		
Tank PV-42 (SWMU	Soil	Closure	TBD	36718995
number will be added		Certification/verification		
once it is given by Lion)		mailed April 7, 2008.		
		Further investigation		
		needed.		

AOC or SWMU	AOC/SWMU Description	Status of CA Activity	Corrective	EDMS
Number/Area Name			Action	Document ID #/
				Approval Date
Tank PR-202 (SWMU	Soil/ Groundwater	Closure	TBD <sup>1</sup>	36718995
number will be added		Certification/verification		
once it is given by Lion)		mailed April 7, 2008.		•
		Further investigation		
		needed.		
Former Incinerator	Soil/ Groundwater	Closure	TBD	36718995
(SWMU number will be		certification/verification		
added once it is given by		mailed April 7, 2008.		
Lion)		Further investigation		
		needed.		
Tank PV-525 (SWMU	Soil/Groundwater	Closure	TBD	36812094
number will be added		certification/verification		
once it is given by Lion)		mailed May 6, 2008.		
		Further investigation		
		needed.		
Drum Storage Pad	Information to be	Information to be		
	Completed	Completed		

<sup>1</sup>. "To be Determined"- The need for corrective action will be determined subsequent to the completion of the CAS Investigation Workplan (RFI Phase II) and the Administrative Authority's approval of the RECAP report.

# **ATTACHMENT 1**

# ATTACHMENT 1 LIST OF FACILITY DOCUMENTS INCORPORATED IN THE PERMIT BY REFERENCE LAD008194060 AI#1433

DOCUMENT TYPE	APPLICATION/DOCUMENT	ELECTRONIC DATABASE	COMMENTS
	DATE	MANAGEMENT SYSTEM (EDMS) DOCUMENT ID	
Financial Assurance	July 26, 2000 (Lion will be	10840849	Volume IV, Appendix C,
	submitting new financial		Attachment 5, Post-Closure
	assurance. Attachment I will be		Renewal Application
	updated in the final permit with the most current information)		
Post-Closure Cost Estimates	December 11, 2007	364685762	Appendix B, Table 1;
			Response to NOD 2
Post-Closure Plan	December 11, 2007	364685762	Appendix B; Response to
			NOD 2
Groundwater Monitoring	December 11,2007	364685762	Appendix D; Response to
Plan/Sampling Analysis Plan1			NOD2
Contingency Plan	December 11, 2007	364685762	Appendix C; Response to
			NOD 2
Inspection Plan	July 26, 2000	10840849	Volume IV, Appendix C,
			Attachment 4, Post-Closure
			Renewal Application
Security Plan	July 26,2000	10840149	Volume III, Appendix B
			Attachment 16; Post-Closure
			Renewal Application
Personal Training Plan	July 26, 2000	10840149	Volume IV, Appendix C,
			Attachment 17; Post-Closure
			Renewal Application

Groundwater Sampling and Analysis Plan (SAP) submitted December 11, 2007 should be followed, except for the changes noted in Condition IV, Tables 2-4, until the new SAP required by II.E.25.a has been approved by the Administrative Authority.